CA SDU Quality Assurance Plan

For the
XEROX California State Disbursement Unit

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1 PLAN OVERVIEW

1.1 Introduction

The CA SDU Quality Assurance Plan describes the Quality Management program and approaches deployed by XEROX to assure the reliable delivery of services in support of the California Child Support Automation System (CCSAS) as the service provider for the California State Disbursement Unit (CA SDU). [SR 1.1.19]

1.1.1 XEROX Operations Management System

The XEROX Operations Management System (OMS) serves as the heart of the Quality Management approach. OMS takes a systems view of performance and quality management and is represented by a five-level pyramid that establishes the operational processes and capabilities required to sustain effective quality delivery (see Figure 1-1). OMS does not just focus on product and service quality, but also on managing the full range of processes and systems used to achieve it.

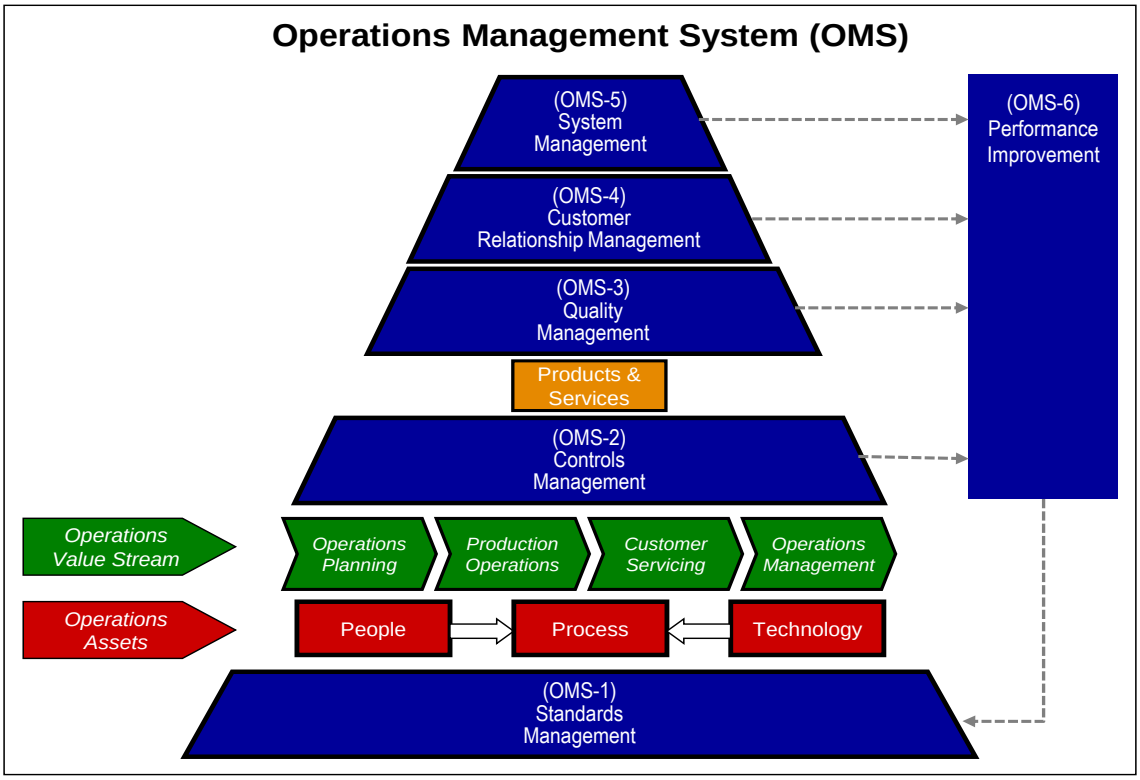

Figure 1-1 - Operations Management System Framework

OMS highlights include:

- OMS focuses on managing the key operational assets (people, process and technology) that support steady-state operations to deliver products and services to the State.
- OMS combines the quality and process management methods promoted by Lean Six Sigma with the performance management disciplines promoted by ISO 9001, the Baldrige Criteria for Performance Excellence and the Balanced Scorecard to establish a fully integrated performance system.
- OMS is a criteria-based system that includes 42 distinct process areas. Baldrige based criteria are established for each process area to address: 1) Approach (via criteria that confirm the sufficiency of

approaches to produce desired results), 2) Deployment (via criteria that confirm approaches are fully and effectively deployed), and 3) Management and Learning (via criteria that confirm deployed approaches are effectively managed and continuously improved). Evidence requirements are established for all criteria to clarify how satisfaction of each criterion is evidenced. These evidence-based criteria establish the foundation for the quality system certification program.

The OMS framework is described in greater detail in Section 7, Operational Excellence (OE) Roadmap.

1.1.2 Quality Management Deployment Strategy

The quality management system deployment strategy described in this plan involves two stages:

Deployment Stage 1 addresses the implementation of requirements-based process and quality controls to assure compliance to established requirements. This is the approach followed by traditional QA/QC programs. In terms of the OMS framework, stage 1 addresses portions OM-3 (Quality Management), OM-2 (Controls Management), OM-4 (Customer Relationship Management), OM-5 (System Management) and OM-6 (Improvement Management).

Deployment Stage 2 applies the Operational Excellence (OE) Roadmap (see figure 1-2) to extend stage 1 processes and controls to include the full OMS framework (i.e., including all 42 process areas). The OE Roadmap utilizes a phases approach to systematically evolve the maturity, capability and manageability of operational processes and practices. Stage 2 deployment via the OE Roadmap is described in greater detail in Section 7, Operational Excellence Roadmap Deployment.

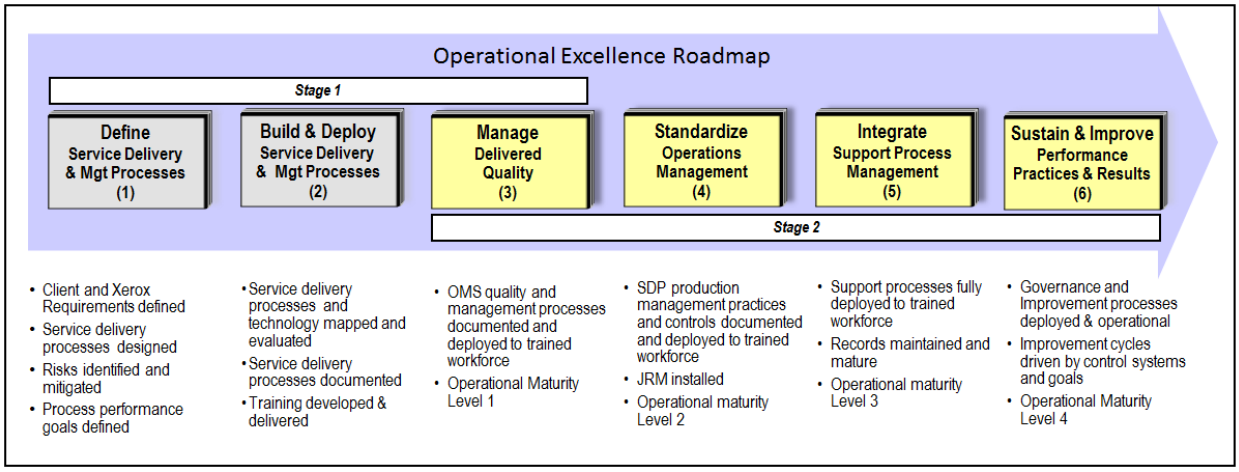

Figure 1-2 - Operational Excellence Roadmap

Operations Management System Certification

Certification sustains OMS effectiveness to reliably meet business and client requirements and drives improvement cycles to meet evolving expectations and bottom-line improvement. Certification is initially performed via a four level progression linked to OE Roadmap phases 3 – 6. Certification audits are conducted by auditors who follow standardized audit practices to conduct comprehensive reviews of operational documentation and records, employee interviews and observations confirm that practices and results comply with system requirements.

Annual Renewal reconfirms OMS operational compliance and effectiveness, identifies and promotes evidence based best practices, and identifies and deploys operational improvement goals linked to corporate performance goals.

The remaining sections of this plan describe how XEROX will develop, deploy, operate and continuously improve service delivery processes and results to assure continued compliance with all requirements.

1.2 Plan Purpose, Scope and Audience

1.2.1 Plan Purpose

The purpose of the Quality Assurance Plan is to describe the quality management processes and practices that will be used to assure reliable delivery of compliant products and services in support of the California Child Support Automation System (CCSAS), including how they will be developed, deployed and managed during steady-state operations. The plan describes how operational and product standards will be established and deployed, how measurement will be used to confirm compliance with those standards, how measurement data will be used to identify improvement opportunities, and how continuous quality improvement will be performed.

The plan also describes the processes and practices that are used to assure an effective ongoing partnership with DCSS, including the processes XEROX uses to report results to clients, listen to clients, provide client serving and access, and work with clients to address mutually agreed upon process improvements. [SR5.3.35]

In addition to meeting the quality requirements established by DCSS, the plan focuses on reliably meeting the service delivery needs of other key customers, including:

1. CPs & NCPs
2. DCSS
3. Local Child Support Agencies (LCSAs)
4. Employers and payroll agencies

1.2.2 Plan Scope

This Quality Assurance Plan addresses the quality planning, management and improvement processes and practices required to assure effective steady-state service delivery operations performed by XEROX on behalf of the Department of Child Support Services (DCSS).

The Service Delivery Processes that comprise the solution include:

1. Collections
2. Exceptions
3. Disbursements
4. Customer Service
5. Systems

The plan does not address the security processes and controls that are addressed via the CA SDU Security Management Plan (OPS 002) or the software quality practices outlined in the CA SDU Support and Test Plan (OPS 010).

1.2.3 Plan Audience

The Quality Assurance Plan communicates the XEROX Quality Assurance processes and practices to relevant stakeholders within the organizations comprising the DCSS system. Relevant XEROX stakeholders include the: Contract Manager, Operations Manager, Call Center Manager, Technical & Security Manager, Testing Manager, Finance and Reconciliation Manager, and Quality Manager.

1.3 Plan Organization

1.3.1 Plan Sections Overview

This plan is organized into the following sections.

1) **Section 1 – Plan Overview** (this section) - provides an introduction to OMS and deployment strategy, establishes plan purpose, scope and audience, and addresses plan maintenance and governance.
2) **Section 2 – Quality Organization** - links quality management practices and process to the CA SDU organization, clarifies quality management roles and responsibilities, and addresses organizational quality learning goals.
3) **Section 3 – Quality Measurement & Control Practices** – clarifies quality and process measurements and controls that are used to measure and control delivered quality.
4) **Section 4 – Quality Management Processes** – identifies the processes that comprise the core QMS (Quality Management System) and the support processes that comprise the balance of OMS. The core QMS processes use the measurements and controls described in section 3 to track, control, correct and/or improve quality performance.
5) **Section 5 – Quality Management Deployment and Operations** – outlines the methods and responsibilities associated with the deployment and ongoing operations of key quality management processes.
6) **Section 6 – Quality Data and Reporting Requirements** – identifies and describes data and reports that are required to comply with client requirements.
7) **Section 7 – Operational Excellence Roadmap** – outlines stage 2 deployment by describing how the Operational Excellence roadmap is applied to service delivery operations to fully deploy OMS. Stage 2 deployment addresses the staged certification program identified in section 1.1.2 (Quality Management Deployment Strategy).
8) **Section 8 – Appendix** – includes the appendix items referenced throughout the plan.

1.4 Plan Maintenance

1.4.1 Plan Review Management

The XEROX Quality Assurance Plan is managed as a part of the XEROX Operations Management System (OMS), with all resulting changes managed by the appropriate Change Management processes.

OMS establishes the operational policies and procedures required scheduling and conducting systematic reviews of all standard plans and processes to confirm their continued effectiveness (see OM-5.2, Operations Management, in section 4.4.1). The review schedule is set annually for all processes comprising OMS. The review schedule establishes review intervals that are appropriate for each process, but never less than once per year. Review schedules will be defined in the Process Review Plan (see section 3.1.5 for additional information).

1.4.2 Plan Change Management

Changes to the Quality Plan are governed by OMS SOP (Standard Operating Procedure) OM-5.2.2.3, Operating Standards Change Management. This procedure identifies the process steps and owners for change submission, review and deployment, leveraging the DCSS Contract Manager as the key point of contact for engaging DCSS in the review process. SOP OM-5.2.2.3 is available for DCSS review at any time, upon request.

Table 1-1 - Referenced Documents

DOCUMENT TITLE	AUTHOR	VERSION/DATE	RELEVANCE TO DOCUMENT
Contract No. 50-0377-19 – Exhibit 7-A – CA SDU Performance Scorecard	DCSS	09.13.2011	Defines scorecard metrics

DOCUMENT TITLE	AUTHOR	VERSION/DATE	RELEVANCE TO DOCUMENT
Contract No. 50-0377-19 – Exhibit 7-B – CA SDU Service Level Standards (SLS) Adjustment Form	DCSS	09.13.2011	Defines Service Level Standards
Contract No. 50-0377-19 - Appendix H Statement of Work Requirements	DCSS	09.13.2011	Defines SOW requirements
CA SDU Problem Resolution Management Plan	XEROX	V4.0 09.12.2013	Describes problem resolution process and improvement methodologies
CCSAS Risk Management Plan	DCSS Enterprise PMP	Ver 5.0 - 01/29/10	CCSAS Risk Management Processes
CCSAS Release Management Plan (RMP)	DCSS Technology Services	Ver. 2.0 - 03/24/10	CCSAS Release Management Policies & Processes
CCSAS Change Request Management Plan (CRMP)	DCSS PMO	01/10	CCSAS Change Management Policies & Processes
Production Control Board Meeting Procedures and Process	DCSS Production Operations	4.2011	Production Control Board Polices & Processes
XEROX Configuration Management Plan	XEROX PMO	V0.1	Supplies guidelines, methods and procedures to be used for Change Management for the life of the XEROX CA SDU Contract

1.5 Associated SOWs

Table 1-2 - Associated SOWs

SOW#	CATEGORY	SUBCATEGORY	REQUIREMENT TEXT	SOURCE REFERENCE
SR 1.1.19	CD - Contract Deliverables	GEN - General	The SP shall develop, deliver and maintain the CA SDU Quality Assurance Plan (CDL OPS 007).	Project Charter, Goal Set 13
SR 5.3.35	CD - Contract Deliverables	GEN - General	The SP shall incorporate DCSS suggestions for process improvement as agreed to between the SP and DCSS.	Project Charter, Goal Set 13

2 QUALITY ORGANIZATION

2.1 Quality Policy

The XEROX CA SDU Quality Policy guides the CA SDU approach to planning, managing and continuously improving delivered quality. The CA SDU Management Team is tasked with assuring the policy is deployed to all operational areas, and reflected in the operational management systems and personnel practices.

XEROX CA SDU Quality Policy

Quality is a basic requirement for the continued satisfaction and loyalty of our customers and guides everything we do. It is our policy to:

- Deliver products and services that meet or exceed customer expectations
- Listen to our customers so we know where we stand, in their eyes
- Promote a culture of personal accountability for quality
- Continuously improve our capabilities to deliver quality products, right the first time
- Deploy and operate sound quality management practices throughout our operations

2.2 CA SDU Organizational Structure and Key Roles & Responsibilities

Although the CA SDU has a dedicated quality team, all CA SDU project staff members are responsible for the management and improvement of quality in their respective areas. OMS is designed to drive quality to the front line and, as such, involves every employee in measuring and improving project performance.

The QA manager has the overall responsibility to manage quality and ensure fulfillment of contractual requirements. The Project Manager ensures that all decisions conform to Contract No. 50-0377-19 and the XEROX proposal and meet the requirements for actual CA SDU operations.

2.2.1 CA SDU Organization Chart

Figure 2-1 (below) includes an organizational chart for the XEROX steady-state organization.

California CA SDU Organization Chart

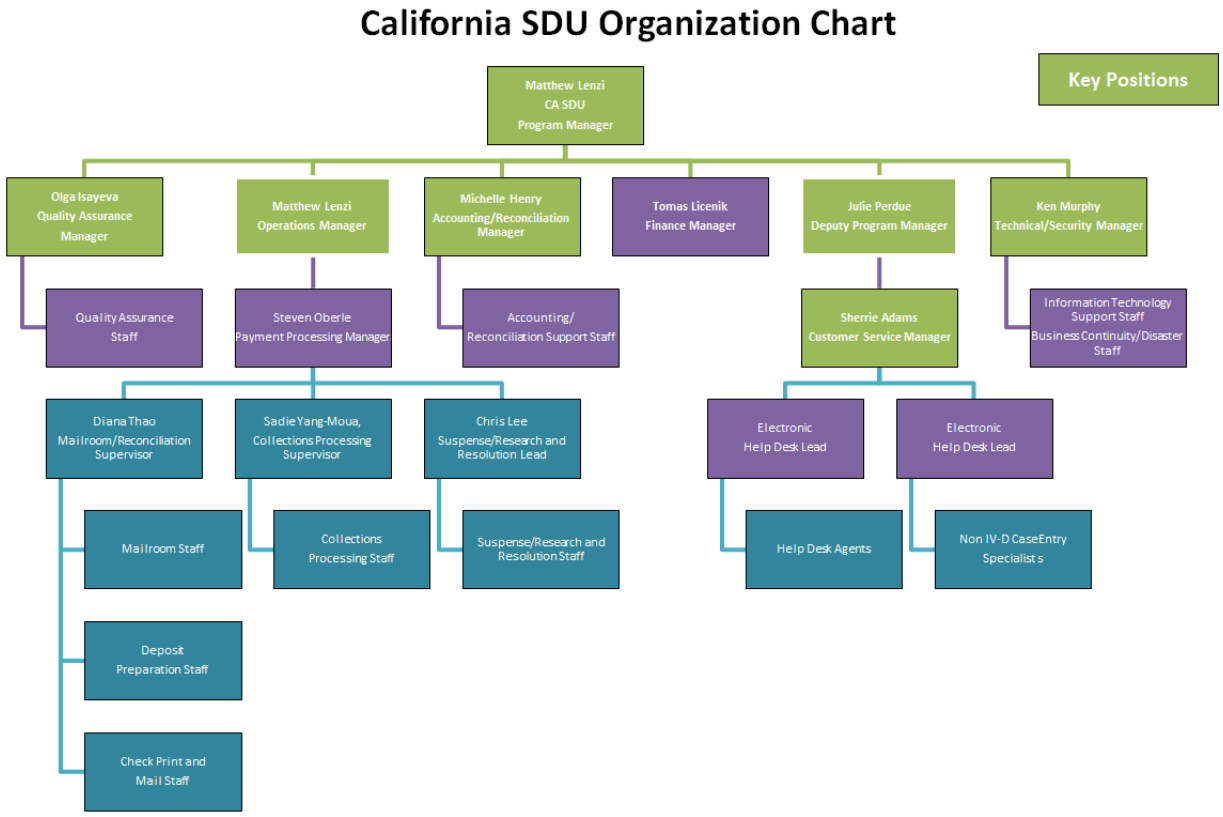

Figure 2-1 - XEROX CA SDU Organizational Chart

2.2.2 CA SDU Management - Key Roles & Responsibilities

The CA SDU Management Roles and Responsibilities are outlined in the Operations Management Plan (OPS-001). Many of these roles and responsibilities are directly linked to effective and sustained quality management.

All managers and supervisors are responsible for understanding and complying with the standards and practices established in this plan. The Quality Assurance team conducted quality plan deployment activities 60 days before operational go-live to assure alignment regarding planned quality and process measurements and controls with each operational group. More detailed approaches for developing, deploying and operating the operational quality processes are defined in Section 5. Quality Management Deployment. Ongoing compliance to quality management practices will be managed by OMS-5.2, Operating Standards Management. Performance requirements and results are being communicated through CA SDU Service Level Attainment Report on monthly basis, defined in 6.2.2.2 and Performance Report and Quality Assurance Report on quarterly basis, defined in 6.2.2.4 and 6.2.2.5.

Table 2-1, CA SDU Management - Key Roles and Responsibilities, outlines the roles and responsibilities associated with each key position. Since many of the roles and responsibilities outlined in OPS-001 (CA SDU Operations Management Plan) either directly or indirectly impact quality, they are repeated in table 2-1. Additional roles and responsibilities that specifically relate to OMS are included at the end of each position. [SR 5.3.1]

Table 2-1 - CA SDU Management - Key Roles and Responsibilities

MANAGEMENT POSITION	ROLE AND RESPONSIBILITIES
CA SDU Program Manager – Key Role **Matthew Lenzi**	• Manages daily CA SDU program operations • Overall responsibility for XEROX performance and ongoing compliance with operational requirements and service level standards • Primary point of contact between DCSS and XEROX and maintains 24/7 accessibility to DCSS project managers • Oversees all CA SDU processing procedures, including payment processing, suspense management, check printing and mailing, electronic disbursements, adjustments, reconciliation, help desk services, information technology, and human resources • Overall responsibility for managing subcontractor relationships throughout all functional areas of the CA SDU operations • Provides guidance and direction to support staff and functional staff, monitoring task completion and taking corrective measures as needed • Leads XEROX team in the identification of operations and system issues, risks, and problems, coordinates analysis, develops mitigation strategies, and manages resolution • Participates in required meetings, including daily production calls, problem resolution team meetings, weekly change control and production control board meetings, weekly and monthly status reports, and monthly CA SDU oversight meeting • Obtains feedback from DCSS and responds with appropriate actions, coordinating with staff as necessary Specific OMS related roles and responsibilities include: • Primary management oversight for Quality Manager and QA team • Performs or oversees operation of the OMS System Management Processes that are positioned to sustain the effectiveness of OMS operations and results (see Figure 7-3 for representation of OMS level 5 processes)
Operations Manager – Key Role **Matthew Lenzi**	• Manages the daily on-site activities in support of the collection and disbursement of child support payments and help desk operations • Oversees all operational procedures and ensures compliance with all service level standards for program operations • Manages compliance with National Automated Clearing House Association (NACHA) standards and compliance with electronic data interchange (EDI)/ electronic transfer fund (EFT) processing • Participates in quality reviews and works with DCSS and XEROX staff to identify process enhancements and improvements to program operations • Manages development, approval, and implementation of all corrective action plans • Oversees problem, incident, and issue resolution for CA SDU program operations • Participates in meetings as required, including daily production calls, change control meetings, and status meetings • Oversees XEROX' development of materials required as part of the Change Request/Impact Analysis Package Specific OMS related roles and responsibilities include: • Assures that all operational and quality related measurements and controls assigned to operations personnel are performed in accordance with established methods and schedules • Assures that identified corrective action needs are addressed in accordance with the XEROX Problem Resolution Process • Assures that identified improvement needs are addressed in accordance with the XEROX improvement Management Process • Performs or oversees operation of the OMS System Management Processes that are positioned to sustain the effectiveness of OMS operations and results (see Figure 7-3 for representation of OMS level 5 processes)

MANAGEMENT POSITION	ROLE AND RESPONSIBILITIES
Payment Processing Manager- **Steve Oberle**	• Manages the daily on-site activities in support of the collection and disbursement of child support payments • Manages Payment Processing, mailroom, exceptions, deposit preparation, and print room Supervisors and staff • Oversees all operational procedures and ensures compliance with all service level standards for program operations • Ensures that all payments are processed in a timely and accurate fashion, in accordance with contractual obligations • Participates in quality reviews and works with DCSS and Conduent staff to identify process enhancements and improvements to program operations • Manages development, approval, and implementation of all corrective action plans • Oversees problem, incident, and issue resolution for SDU payment processing operations • Participates in meetings as required, including daily production calls, change control meetings, and status meetings • Handles all escalated personnel issues for mailroom, payment processing, print room, and deposit preparation
Deputy Project Manager - **Julie Perdue**	• Reports directly to the Contract Manager to implement and sustain project quality • Updates XEROX standard quality assurance plan to reflect California specific service level agreements and performance expectations • Develops and implements quality control measures for project • Reviews and updates procedures and program documentation • Assures that all operational and quality related measurements and controls assigned to operations personnel are performed in accordance with established methods and schedules
Quality Assurance Manager – Key Role **Olga Isayeva**	• Management responsibility for all quality assurance activities during program operation in compliance with the Operations Management System (OMS) • Oversee daily quality auditing (measurement and controls) and weekly quality analysis activities to measure compliance to service level standards and to manage and/or improve the capability of Service Delivery Processes (SDP) • Assure compliance to all service delivery standards, and initiate or facilitate initiation of corrective actions when warranted • Serve as principle point of contact with DCSS for quality related matters • Participate in quality related meetings • Facilitate effective partnership with DCSS staff regarding quality and process improvement activities • Provide quality related training and coaching to quality team and operations personnel (including Lean Six Sigma, OMS, etc.) to instill quality culture and capabilities • Serve as lead facilitator for corrective action and improvement projects that use DMAIC (Define, Measure, Analyze, Improve and Control) • Manage XEROX Problem Resolution and Improvement Management Processes to promote systematic, fact based, problem solving that resolves root causes to problems or needs • Manage quality related reporting to assure that DCSS and XEROX personnel are fully aware regarding quality performance and improvement actions Specific OMS related roles and responsibilities include: • Assures all client quality requirements are translated to Process Measurement Plans and that all metrics are recorded timely and accurately • Assures that all SDPs have performance metrics defined in Process Measurement Plans and that all metrics are recorded timely and accurately • Define, document and perform Process Validation • Define, document and perform Process Reviews • Develop and administer all OMS level 3 and 4 processes

MANAGEMENT POSITION	ROLE AND RESPONSIBILITIES
Technical Manager – Key Role **Julie Perdue (Interim)**	• Acts as senior management within XEROX for information technology management • Manages day-to-day technical operations • Ensures service level standards related to system operations are met or exceeded • Works with DCSS technical staff to identify and implement improvements to system operations • Troubleshoots technical issues and provides expert advice to transition and operations technical staff • Participates in quality reviews of all technical operations, including meetings such as the daily production call and weekly and monthly status meetings • Monitors progress and prepares required reports • Monitors and reports on software development progress and adherence to schedule during program operations • Approves tested software for release to system test and validates successful completion of user acceptance testing • Creates documentation and estimates for any required Change Request/Impact Analysis Packages • Assures that all system processes are documented Specific OMS related roles and responsibilities include: • Assures that all operational and quality related measurements and controls assigned to operations personnel are performed in accordance with established methods and schedules • Assures that identified corrective action needs are addressed in accordance with the XEROX Problem Resolution Process • Assures that identified improvement needs are addressed in accordance with the XEROX improvement Management Process • Performs or oversees operation of the OMS System Management Processes that are positioned to sustain the effectiveness of OMS operations and results (see Figure 7-3 for representation of OMS level 5 processes)
Accounting/Reconciliation Manager – Michelle Henry	• Directs all activities of the accounting department, including direct supervision of reconciliation staff • Supervises staff in processing of EFT transactions • Resolves banking questions, issues, and clarifications • Validates compliance with all relevant service level standards and quality targets • Ensures that all expenses are properly recorded, invoices are prepared on a timely basis, and reimbursement items are properly reported and invoiced • Ensures all banking responsibilities assigned to the contract are executed • Reviews all financial reports prior to submission • Processes report data • Prepares and monitors project and department required reports • Works closely with senior management on budget preparation and finalization • Manages resolution of outstanding banking errors Specific OMS related roles and responsibilities include: • Assures that all operational and quality related measurements and controls assigned to operations personnel are performed in accordance with established methods and schedules • Assures that identified corrective action needs are addressed in accordance with the XEROX Problem Resolution Process • Assures that identified improvement needs are addressed in accordance with the XEROX improvement Management Process • Performs or oversees operation of the OMS System Management Processes that are positioned to sustain the effectiveness of OMS operations and results (see Figure 7-3 for representation of OMS level 5 processes)

MANAGEMENT POSITION	ROLE AND RESPONSIBILITIES
Customer Service Manager – Key Role **Sherrie Adams**	• Manages and provides oversight of customer service/help desk staff • Supervises help desk leads and Non IV-D case entry specialist • Ensures EFT questions are properly handled • Serves as the liaison between DCSS and XEROX customer service staff • Ensures service level standards and quality targets related to customer service processes are met or exceeded • Coordinates staff training meetings for customer service staff • Handles all customer service personnel issues • Responsible for implementing new procedures to continuously improve the overall performance of the operation Specific OMS related roles and responsibilities include: • Assures that all operational and quality related measurements and controls assigned to operations personnel are performed in accordance with established methods and schedules • Assures that identified corrective action needs are addressed in accordance with the XEROX Problem Resolution Process • Assures that identified improvement needs are addressed in accordance with the XEROX improvement Management Process • Performs or oversees operation of the OMS System Management Processes that are positioned to sustain the effectiveness of OMS operations and results (see Figure 7-3 for representation of OMS level 5 processes)
Security Manager – Key Role **Julie Perdue (Interim)**	• Manages implementation of XEROX security controls in accordance with applicable DCSS standards • Establishes protocols for all aspects of CA SDU program operations, including physical, technical, and procedural security • Conducts security training for program operations staff • Maintains compliance with all required DCSS security protocols • Works with technical manager to ensure that KidStar system maintains adequate system security processing • Manages business continuity and disaster recovery planning and operational efforts • Work with XEROX Corporate Security Staff to continuously probe CA SDU systems for potential vulnerabilities Specific OMS related roles and responsibilities include: • Assures that all operational and quality related measurements and controls assigned to operations personnel are performed in accordance with established methods and schedules • Assures that identified corrective action needs are addressed in accordance with the XEROX Problem Resolution Process • Assures that identified improvement needs are addressed in accordance with the XEROX improvement Management Process • Performs or oversees operation of the OMS System Management Processes that are positioned to sustain the effectiveness of OMS operations and results (see Figure 7-3 for representation of OMS level 5 processes)

CA SDU Contract Manager Matthew Lenzi is responsible for maintaining the list of CA SDU key contacts. He will notify DCSS immediately (within 1 business day) by email of any changes to key personnel or their contact information. [SR 5.2.3]

2.3 Quality Assurance Organization

2.3.1 Quality Assurance Team Objectives

The quality team is responsible for performing the quality processes outlined in this plan to achieve the following quality management objectives:

- Maintain and deploy DCSS and XEROX quality requirements
- Assure delivered products and services comply with quality requirements
- Maintain and deploy quality management standards and practices (including this plan)

- Assure compliance to established portioning practices (including operating procedures, quality management processes, etc.)
- Monitor the capability of key service delivery processes to meet design requirements
- Coordinate the initiation and execution of corrective actions, when required
- Coordinate continuous improvement actions
- Deploy Lean Six Sigma and quality management principles and practices to establish "quality culture" at all levels of the operation
- Prepare and distribute quality reports as required to communicate performance relative to targets, corrective actions, improvement goals and actions, etc.

The processes, methods and tools required to achieve these objectives are outlined throughout this plan.

2.3.2 Quality Assurance Team Roles & Responsibilities

a) Quality Assurance Manager (Olga Isayeva)

The Quality Assurance Manager has overall responsibility for the quality assurance objectives outlined above, and for assuring the policies and practices outlined in this plan are fully and accurately deployed to all operating groups and personnel. Detailed roles and responsibilities were listed in Table 2-1 (above)

b) Quality Analyst (2)

The Quality Analysts support the QA Manager in meeting the quality assurance objectives and for assuring the policies and practices outlined in this plan are fully and accurately deployed to all operating groups and personnel. Additional duties include:

- Maintain quality management program and process documentation (including this plan)
- Develop and deploy quality and process measurements and related processes
- Conduct audits to validate operational controls and quality performance
- Initiate corrective action responses, when warranted
- Maintain audit records and logs to enable subsequent quality analysis
- Conduct analysis of quality and process measurement data to identify improvement needs
- Support production incident resolution and continuous improvement actions
- Provide quality control training to quality and operational staff
- Prepare quality reports
- Review operational procedures to confirm completeness, accuracy and integration with OMS, when appropriate

2.3.3 Quality Assurance Knowledge & Skills Development

Six Sigma methods and tools are integrated through the quality processes described in this plan. To effectively utilize Six Sigma methods the CA SDU will establish two Six Sigma Green Belts by 8/31/12. Training, coaching and certification for these personnel will be facilitated by the CA SDU Quality Manager, who is a Six Sigma Master Black Belt (the highest level recognized by Six Sigma practitioner).

2.4 Associated SOWs

Table 2-2 - Associated SOWs

SOW#	CATEGORY	SUBCATEGORY	REQUIREMENT TEXT	SOURCE REFERENCE
SR 5.3.1	OP - Operations	GEN - General	The SP shall provide a written description of the CA SDU organization. This description shall identify roles and responsibilities of each organizational entity and indicate the relationship to DCSS organizations. The organizational description shall include the identity of key roles.	Project Charter, Goal Set 10
SR 5.2.3	OP - Operations	COM - Communication	The SP shall provide SP contact information changes to the DCSS CA SDU Contact Coordinator within 1 business day of the change.	Project Charter, Goal Set 10

3 QUALITY MEASUREMENT & CONTROL PRACTICES

3.1 Measurement & Control Framework

The Operational Performance Measurement & Control Framework identifies and positions the measurements and controls used to manage quality and operational performance. As shown in Figure 3-1, the framework applies measurements and controls to Service Delivery Processes to understand and manage process performance and delivered quality.

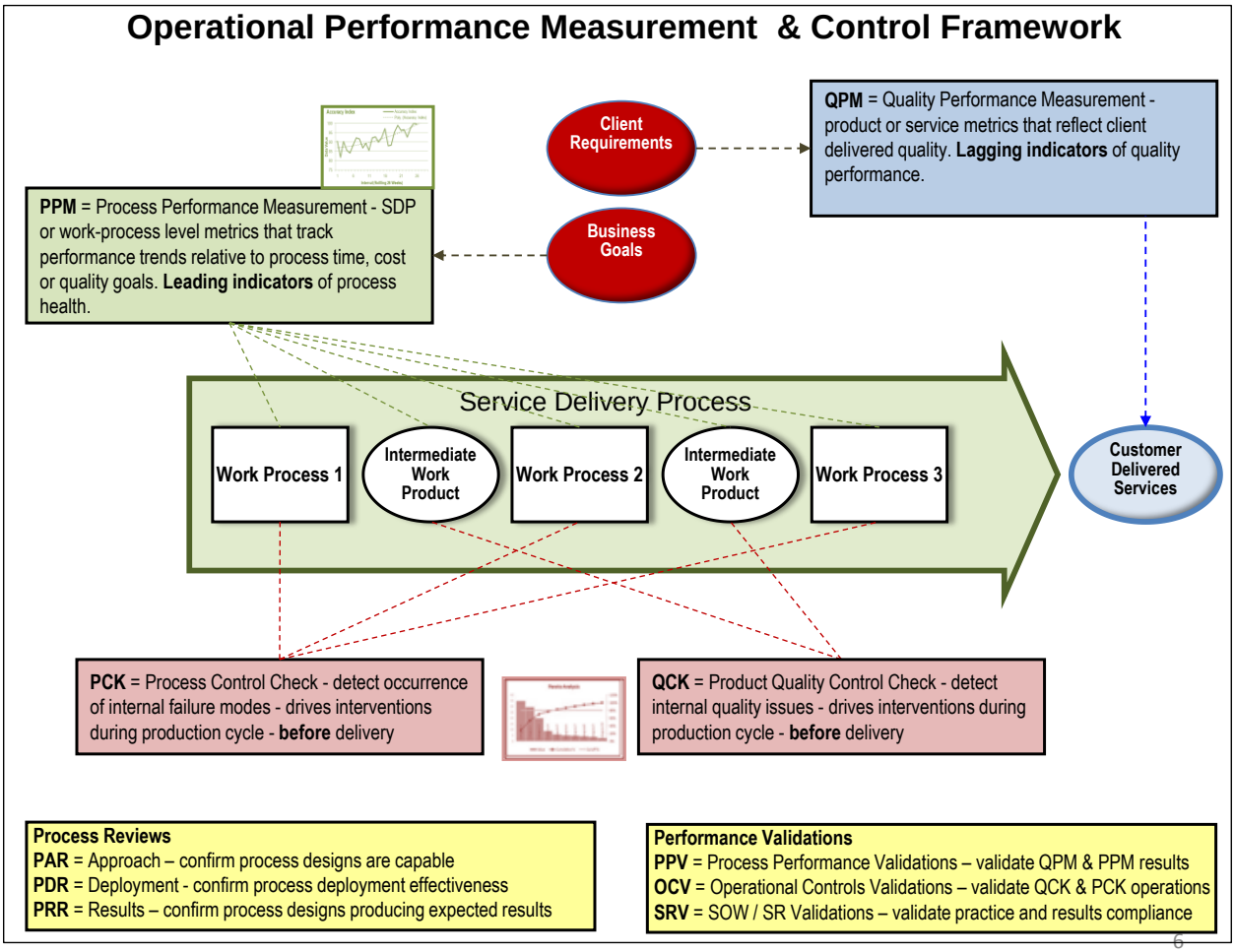

Figure 3-1 - Operational Performance Measurement & Control Framework

Defining Service Delivery Processes

A Service Delivery Process is an end-to-end business process that produces and delivers value adding products and services to customers. Service Delivery Processes (also referred to as SDPs) always begin and end with the customer and include: the 1) processing Methods, 2) that are performed by Workforce and 3) enabled by Technology to produce and deliver products and services.

Positioning the SDP as the foundation for performance management is integral to OMS and makes it possible to:

- identify and relate the process elements required to produce desired customer and business outcomes

- understand and manage cross-functional interdependencies
- align organizational functions to process goals
- provide the basis of measuring and managing component performance relative to process goals
- promote repeatability and reproducibility across process deployments

The balance of this section describes the measurement and control categories introduced in figure 3-1 (Operational Performance Measurement & Control Framework).

3.1.1 Quality Performance Measurements (QPMs)

Quality Performance Measurements (QPMs) describe the level of quality present in the products or services delivered to customers via Service Delivery Processes and are linked to customer requirements and expectations. When evaluating delivered quality, products are generally evaluated in terms of product attributes (things that are present or not), while services are evaluated in terms of service behaviors (behaviors that occur or not).

3.1.1.1 Quality Measurement Foundations

Quality Measurement Types

Quality performance measurements are generally expressed using one of the two forms described below. The form used generally depends on the intended purpose of the measurement.

1) Delivered Quality – Delivered Quality is a yield-based metric that reflects the percentage of service delivery items that fully comply with client requirements. Delivered Quality identifies the proportion of service items that are not defective (i.e., items that contain no defects). Since clients and customers generally view a service delivery item as correct or not correct, the Delivered Quality metric reflects the customer experience.

2) Quality Yield – Quality Yield is a normalized yield-based metric that reflects the underlying quality present in delivered products and services by considering the defect density present in the population. Quality Yield is a more sensitive metric than Delivered Quality as the number of defects present in a single service item can vary considerably (without producing any change in the Delivered Quality rate). Since Quality Yield is the more sensitive metric, it is preferred for determining if quality is trending in any meaningful way. A common technique for developing Quality Yield metrics is the DPMO approach introduced by Six Sigma (discussed below)

Using the Six Sigma DPMO Metric

In order to promote effective quality measurement methods OMS leverages the DMPO technique where appropriate to translate "quality" into specific dimensions that are relevant and objectively measureable. DPMO stands for Defect Per Million Opportunities.

The DPMO method produces quality yield metrics that are: 1) normalized (so they can be compared across products and processes), 2) sensitive (revealing small changes in underlying quality or process performance) and 3) actionable (focusing corrective actions). The following concepts and terms are integral to developing and using DPMO based quality yield metrics.

- Quality Requirement – a customer defined requirement – generally, but not necessarily, contractually based.
- CTQ (Critical to Quality) – a CTQ is a single product attribute or service behavior that is required to be present for a service delivery item (product or service) to possess quality. CTQs are used to translate Quality Requirements to specific product and service items.

- Defect – an unsatisfied CTQ found in a service delivery item. Multiple defects may occur in a single service delivery item.
- Defective - a service delivery item (product or service) that contains one or more defects is considered defective.
- Defect Opportunity – any opportunity to create a defect (an unsatisfied CTQ) in a service delivery item. There may be multiple opportunities to create a defect within a single service delivery item.
- DPMO (Defects Per Million Opportunities) - a normalized quality yield metric that reflects the underlying quality in service delivery items (products and services). DPMO is widely used as an indicator of process capability.

Using a Process Capability Statistic to Enable Predictive Process Management

QPMs may be translated to a predictive "Process Capability" statistic that describes a processes' ability to meet performance requirements, normally expressed as a capability percentage (e.g., a process is 98% capable). Process Capability is determined via Statistical Process Control (SPC) techniques and describes the operating limits of a process. See Section 3.3, Process Management, for information addressing Process Management.

3.1.1.2 Quality Measurement Development & Deployment

OMS Process 3.1 (Quality Requirements Deployment) is an OE Roadmap step 3 process responsible for translating customer product and service requirements into the measurements that are used to report quality performance and to manage the processes that produce product and service quality results.

As mentioned previously, product and service quality requirements deployment is conducted at the SDP level to translate each requirement into the Critical Quality Characteristics (CTQs) that describe each product and service produced and/or delivered by the process. A single product or service delivery item may (and generally will) have multiple CTQs associated with it (where each CTQ is a single measureable product attribute or service behavior). A product or service is fully quality compliant when all CTQs are satisfied.

QPMs are documented using the Process Measurement Plan. Process Measurement Plans are established for each SDP to operationally define each QPM metric and its' component measurements and to document key measurement operations information (including capture method, recording method, data location, and performance targets). Copies of the Process Measurement Plan template and supporting data dictionary are included in Appendix 8.3, SDP Measurement Plan.

QPM measurement results data are maintained in the Operations Metrics Database (OMD).

3.1.2 Process Performance Measurements (PPMs)

Whereas QPMs reflect delivered results relative to product and service quality requirements, Process Performance Measurements (PPMs) reflect process performance relative to goals derived from process purpose. In general terms, QPMs are positioned as lagging indicators of delivered quality, while PPMs are positioned leading indicators of the capability of processes to efficiently deliver quality. The performance management strategy embraced by OMS is to manage PPMs to achieve favorable QPM results.

3.1.2.1 Process Measurement Foundations

PPMs may be defined at the SDP level to reflect end-to-end performance (e.g., lead time, cycle time or cost) or at the component Work Process level to understand and manage sub-process performance. Work Process focused PPMs are always defined to reflect parent SDP level purpose and goals to assure internal alignment and to enable predictive process management.

Process Performance Measurement Dimensions

PPMs typically address one of the following dimensions of process performance:

1) Time - to know if time being efficiently utilized or if timing expectations being satisfied
2) Efficiency - to know if resources are efficiently utilized in the performance of value adding work
3) Quality - to know if internal deliverables are efficiently meeting quality expectations

Using the First Pass Yield Statistic to Enable Predictive Process Management

The First Pass Yield (FPY) Metric is a key efficiency indicator that reflects the ability of a process to "get it right the first time" - expressed as the percentage of service delivery items making it through a process without intervention (i.e., no correction or rework). Generally, the higher the First Pass Yield, the higher the efficiency of the underlying process. First Pass may be evaluated via Process Capability analysis to describe the operating limits of a process. (See Section 3.3 for review of Process Management practices).

3.1.2.2 Process Measurement Development & Deployment

OMS Process 2.2.2 (Service Delivery Results Management) is an OE Roadmap step 3 processes responsible for identifying SDP Performance goals and translating them into PPMs. Additionally, OMS Process 5.3.1 (Operating Results Goals Definition & Deployment) is an OE Roadmap step 6 processes responsible for translating organizational performance goals into SDP goals and for translating SDP goals into PPMs.

PPMs are documented in the Process Measurement Plan – which is established for each SDP to operationally define each PPM metric and its component measurements and to document key measurement operations information (including capture method, recording method and data location).

Copies of the Process Measurement Plan template and supporting data dictionary are included in Appendix 8.3, SDP Measurement Plan.

PPM measurement results data are maintained in the Operations Metrics Database (OMD).

3.1.3 Quality & Process Controls

QPMs and PPMs are used to understand current performance levels and to manage performance based on long-term trends and patterns. They are considered passive measurements as they are not used to drive in-flight (real time) interventions. Quality and Process Control Checks are positioned as active checks that "do" drive in-flight interventions based on detected outcomes

Product Quality Checks (QCKs) and Process Control Checks (PCKs) are performed by operational personnel to detect internal product quality or processing issues and to drive in-flight interventions (e.g., corrections) before work products are allowed to move to the next process step. QCKs and PCKs prevent detected errors from reaching the customer.

3.1.3.1 Quality & Process Controls Foundations

QCKs and PCKs are installed inside Work Processes to address operational risks that warrant control. Control needs are determined by identifying and evaluating potential failure modes (things that may go wrong). Potential failure modes and their effects (i.e., impacts on performance) are evaluated and prioritized by considering: 1) the significance of the effect, 2) the probability of occurrence, and 3) the detectability of the failure mode or effect. These dimensions are combined to derive a risk score for each potential failure mode, leading to the establishment of operational controls for high-risk failure modes.

3.1.3.2 Quality & Process Controls Development & Deployment

OMS Process 2.2.1 (Service Delivery Process Operational Controls) is an OE Roadmap step 4 process responsible for evaluating the operational risks associated with SDPs and component Work Processes, determining the internal QCK and PCK needs and for defining and deploying the needed controls.

QCKs and PCKs are documented using the Process Control Plan. The Process Control Plan is established for each SDP to operationally define the QCKs and PCKs used to control component work process operations and results. Control definitions include: risk parameters, control objectives, control frequencies and methods, procedural references, control standards and response plans. Control standards describe the objective criteria used to evaluate control performance and response plans describe the actions to be performed if standards are not met. [SR 5.3.39-3].

Copies of the Process Control Plan template and supporting data dictionary are included in Appendix 8.4, SDP Control Plan.

3.1.4 Performance Validations

Performance Validations are positioned as Quality Assurance audits designed to validate key Service Delivery Process practices and results.

3.1.4.1 Performance Validation Foundations

Three types of Performance Validations may be performed.

1) Process Performance Validations (PPV) – are performed to validate that SDPs are meeting established quality and performance targets (i.e., SPD QPMs and PPMs are meeting targets defined in Process Measurement Plans).
2) Operational Control Validations (OCV) – are performed to validate that Operational Controls (PQKs and QCKs) are performed correctly and timely, using valid control data, and driving the appropriate responses.
3) SOW / SR Validations (SRV) – are performed to validate that SOW requirements related to practices compliance and results attainment are fulfilled on a continuing basis. SOW requirements related to startup or design requirements are not included in this category.

3.1.4.2 Performance Validation Development & Deployment

OMS Process 3.1.3 (Performance Validation Requirements) and 3.2.2 (Performance Validation Development) are OE Roadmap step 3 processes responsible for determining performance validation requirements for each SDP and for defining and deploying identified validation controls.

Validations are defined in the SDP Performance Validation Plan that is established for each SDP. The Performance Validation Plan uniquely identifies each validation operation, operationally defines validation methods and scheduling, and establishes the response actions to be deployed when non-conformities are identified. When sampling is used, sampling levels and methods are defined in the validation plan.

Copies of the Performance Validation Plan template and supporting data dictionary are included in Appendix 8.5, SDP Validation Plan.

3.1.5 Process Reviews

Whereas Quality Performance Validations focus on the operational performance of SDPs, Process Reviews focus on the designs and deployment of SDPs. Process Reviews seek to assure that: 1) process designs effectively and efficiently meet quality requirements and performance goals, 2) deployment methods and actions are effective, and 3) processes are operating efficiently. Process Reviews are conducted at the work process level on an annual basis.

3.1.5.1 Process Review Foundations

Three types of Process Reviews may be performed:

1) Process Approach Review (PAR) – reviews the process approach (i.e., design and enabling tools) to confirm the design is capable of effectively and efficiently meeting quality and business goals.
2) Process Deployment Review (PDR) – reviews the methods and practices used to deploy the process approach to operations personnel (where deployment includes the actions required to assure personnel know there responsibilities and are sufficiently skilled to perform responsibilities).
3) Process Results Review (PRR) – reviews the operational effectiveness of process management practices (e.g., controls and corrections) to confirm their continued effectiveness. For example a result review item would ask if external failures are occurring for items that have internal controls installed, or if internal controls are detecting failures or not).

Process Reviews will involve various stakeholders – depending on the type of review being performed. Process Approach Reviews will generally require external Subject Matter Experts (SMEs) to provide the business and/or technical perspectives required. Deployment and Results Reviews will generally be performed by internal resources, using pre-defined checklists. Review findings will be used to drive process improvement actions, when warranted.

3.1.5.2 Process Review Development & Deployment

OMS Process 5.2.4 (Operating Standards Management Review) is an OE Roadmap step 3 process responsible for determining Process Review requirements for each SDP and for defining and deploying identified reviews.

Process Review types and schedules are defined in the Process Review Plan that is established for each SDP.

Copies of the Process Review Plan template and supporting data dictionary are included in Appendix 8.6, SDP Process Review Plan.

3.2 Measurement Systems Practices

3.2.1 Measurement Sampling

Sampling is used when full population measurement is not practical. Sampling develops population estimates that always contain some degree of sampling error. The accuracy of the sample estimates is determined by several factors (including population size, population distribution, and sample size) and is expressed via the sample confidence level and confidence intervals. Sampling methods must be random for estimates to be reliable.

In some cases, sample sizes are not set to deliver precise confidence levels and intervals on a daily basis, as the sample size requirements would be prohibitive. However, in all cases, monthly sample sizes will be designed to satisfy accuracy requirements.

Figure 3-2 (Sample Size Calculator) shows an example of the sample size calculator used to determine single-sample sampling plans and illustrates how the daily and monthly confidence intervals are related. The first row in the example involves a monthly population size of 500,000, average quality value of 98% and a target quality standard of 98%. The confidence interval required to discriminate target attainment is +/- 0.40% (20% of interval between the 98% target and 100%) with an associated sample size of 0.9%. Daily sampling (at the 0.9% sample rate) yields a +/- 1.9% confidence interval, which is less predictive than the monthly +/- 0.20 confidence interval.

SAMPLE SIZE CALCULATOR

Determining CI and Sample Sizes based on Specification Values (@ 95% CL)

	Monthly Sampling Plan								Daily Sampling Results (Based on avg mo volumes)			
Description	Avg Mo Volume (#)	Avg Quality %	Target Quality Q%	Req'd CI (+/- %)	Grs Sample (n)	Adj Sample (n)	ADJ Sample %		Avg Daily Vol	Avg Quality %	Daily Sample (n)	Daily CI (+/- %)
Item 1	500,000	98.00%	98.00%	0.40%	4,706	4,662	0.9%		23,073	98.00%	215	1.9%
Item 2	500,000	99.00%	98.00%	0.40%	2,377	2,366	0.5%		23,073	99.00%	109	1.9%
Item 3	500,000	50.00%	98.00%	0.40%	60,025	53,591	10.7%		23,073	50.00%	2,473	1.9%
Item 4	1,200,000	99.00%	98.00%	0.40%	2,377	2,372	0.2%		55,376	99.00%	109	1.9%
Item 5	1,200,000	98.00%	98.00%	0.40%	4,706	4,688	0.4%		55,376	98.00%	216	1.9%
Item 6	1,200,000	50.00%	98.00%	0.40%	60,025	57,166	4.8%		55,376	50.00%	2,638	1.9%

Terms
CI = Confidence Interval
CL = Confidence Level

Entry Values (by Column)
A = Sampled Item Description
B = Average Monthly Volume
C = Average Monthly Quality Level
D = Target Value

Result Values (by Column)
E = Required Sample Confidence Interval (@20% Spec Width)
F = Required Sample Size (unadjusted for volume)
G = Required Sample Size (adjusted for volume)
H = Sample Sample Size (as % of volume)
J = Resulting Average Daily Volume
K = Resulting Average Daily Quality
L = Resulting Daily Sample Size
M = Resulting CI +/- from daily sampling

Figure 3-2 - Sample Size Calculator

When sampling is used, sampling details are defined in the Process Measurement Plan for the QPMs or PPMs involved. Sampling details include sample frequency, sample rates (e.g., sample size / population size) and resulting confidence intervals (e.g., +/-n%). Since all sampling is set at the 95% confidence level, confidence levels are not included in Measurement Plans. [SR 5.3.39-1]

3.2.2 Measurement Systems Management

3.2.2.1 Measurement Execution Management

OMS process 5.2 (Operating Standards Management) includes provisions for periodically confirming that all operational processes are performed in conformance to process designs - including the processes used to perform process and quality measurement and controls.

3.2.2.2 Measurement Reliability Management

Quality measurement reliability is addressed via measurement calibration processes.

Measurement calibration is used when needed to confirm that measurement processes are sufficiently repeatable, reproducible and reliable. Calibration identifies and evaluates measurement variance within and across practitioners to understand measurement error.

It is important to note that measurement calibration is used to validate and possibly improve measurement systems. Calibration is NOT intended to serve as a quality improvement tool.

1) **Internal Measurement Calibration**

Internal measurement calibration is used to confirm that quality measurements meet reliability requirements. Internal calibration is especially important in situations where multiple personnel are performing the same measurements.

OMS processes 3.3.1 (Internal Calibration Requirements Analysis) and 3.3.2 (Internal Calibration Analysis and Corrective Action) are OE Roadmap step 6 processes responsible for developing and deploying internal calibration processes for measurement that are determined by multiple measurement resources (e.g., multiple auditors) and/or when measurements are subjectively derived.

2) **Client Calibration**

Client calibration may be used when needed to assure alignment between XEROX and clients when there are concerns regarding the accuracy of XEROX or client practices. In all cases, client calibration is aimed at achieving the same result if measurement is conducted for the same population by different entities (e.g., operational units, quality assurance staff, and DCSS staff).

OMS process 4.5 (Client Calibration) is responsible for calibrating measurements that are reported to the DCSS, when needed to align methods and/or perceptions regarding reported results.

3.2.2.3 Measurement Effectiveness Management

The sustained effectiveness (i.e., appropriateness and usefulness) of measurements is addressed via the following methods:

- Requirements-based measurements are re-evaluated when requirements change. Requirements changes are handled via OMS process 4.1 (Client Requirements Management) and the XEROX Configuration Management Process.
- Risk-based measurements and controls established during transition will be reviewed via OMS Process 2.2.1 (Operational Controls) during OE Roadmap step 4 to assure they are systematically determined and validated for relevance.
- All process measurements and controls are translated to SDP Measurement and Control Plans (templates included in Appendices 8.3 and 8.4), which are reviewed periodically via OMS process 5.2 (Operating Standards Management) to assure continued relevance and effectiveness.
- As a key user of process and quality result data, OMS process 3.2.3 (Quality Measurement and Control – Performance Analysis) is uniquely positioned to determine if process and quality results data are useful or sensitive enough to enable the detection of improvement opportunities or needs. In general, if the data are not signaling opportunities, it is time to reconsider the underlying measurement designs.

3.3 Process Management

Quality measurements describe the level of quality in the products and services delivered to customers and quality controls seek to detect and correct quality issues before products and services are delivered to customers. Quality measurements tell us how we did and controls resolve identified errors – however, neither proactively influences the capability of processes to deliver quality, right the first time.

Process Management seeks to proactively manage quality by managing the “capability” of the Service Delivery Processes that produce and deliver products and services.

As mentioned in section 3.1.1.1 (Quality Measurement Foundations), “Process Capability” is a statistic that describes the ability of processes meet performance requirements without intervention - normally expressed as a capability percentage (e.g., a process is 98% capable). The Process Capability metric is computed using Statistical Process Control (SPC) techniques that evaluate the variation present in processes and to determine the operating limits of processes.

3.3.1 Process Capability Applications

Since Process Performance Metrics (PPMs) are, by definition, positioned as leading indicators or drivers of quality performance, Process Capability techniques are generally applied to PPMs. This way, capability analysis is managing the determinants of quality, not quality results.

3.3.2 Process Variation Management

Process variation management is integral to sustaining capable processes – as the greater the variation present in a process, the less predictable and manageable a process becomes. Statistical Process Control

(SPC) is a widely used process management tool that helps us manage process variation. Two types of variation are identified by SPC techniques:

- Common-Cause Variation – Common-cause variation is the general background noise that occurs in any process. It is a natural byproduct of the process design and is normally distributed (i.e., it aligns with the normal curve). Common-cause variation determines the capability of our processes, as long as there is no special-cause variation operating (discussed next).
- Special-Cause Variation - Unlike common-cause variation, special-cause variation is not a natural part of the system. It is driven by external or intermittent causes that destabilize processes and make them unpredictable (i.e., it no longer aligns with the normal curve). When this occurs, the process is said to be "out of control" (which means the process variation is no longer normally distributed). Special-cause variation is a signal that the process has changed.

Understanding the types of variation present in processes is important because:

a) It guides the identification of corrective action strategies

b) It discourages tampering (where efforts to improve processes actually degrade performance because they misinterpret variation)

3.3.3 Process Control & Capability

A capable process is simply a process that is able to consistently meet requirements at a targeted capability yield (e.g., 99.7% if capability defined using the traditional 3 sigma or 99.99966% if capability defined using 6 sigma conventions). When described in terms of variation, this means: 1) there is no special-cause variation present and 2) the common-cause variation that is present operates within acceptable tolerances. It's important to note that an "out of control" process cannot be considered capable, regardless of the outcomes it produces.

The strategy for maintaining "capable" processes involves two steps: 1) identifying and eliminating special-cause variation and 2) keeping the common-cause variation operating within acceptable levels.

Two tools are used:

1) **Control Charts** - Control Charts (see figure 3-3 for example) are used to determine if processes are "in control" (i.e., no special-cause variation evident) or "out of control" (i.e., special-cause variation present). Control Charts are generated by SPC software tools that apply probability statistical techniques to identify the presence of special-cause variation. In Figure 3-3, the red data points are out of control – indicating that special cause variation is operating in the process.

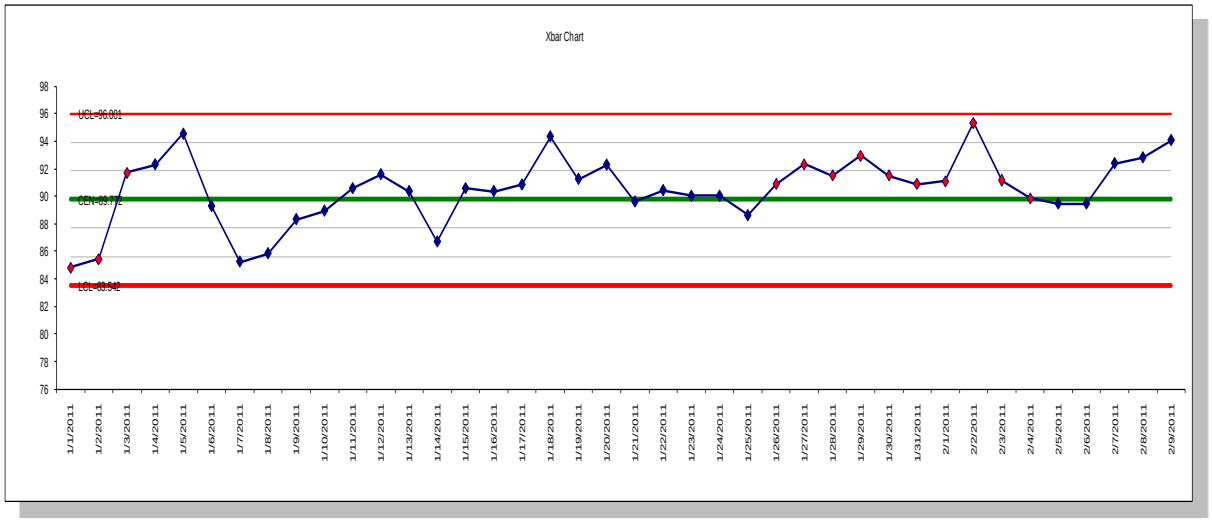

Figure 3-3 - Process Control Chart

2) **Process Capability Diagrams** – Capability Diagrams (see figure 3-4) are used to evaluate the common-cause variation present in processes to determine if processes are operating within acceptable tolerances. In the example, the red area is predicted to be out of compliance.

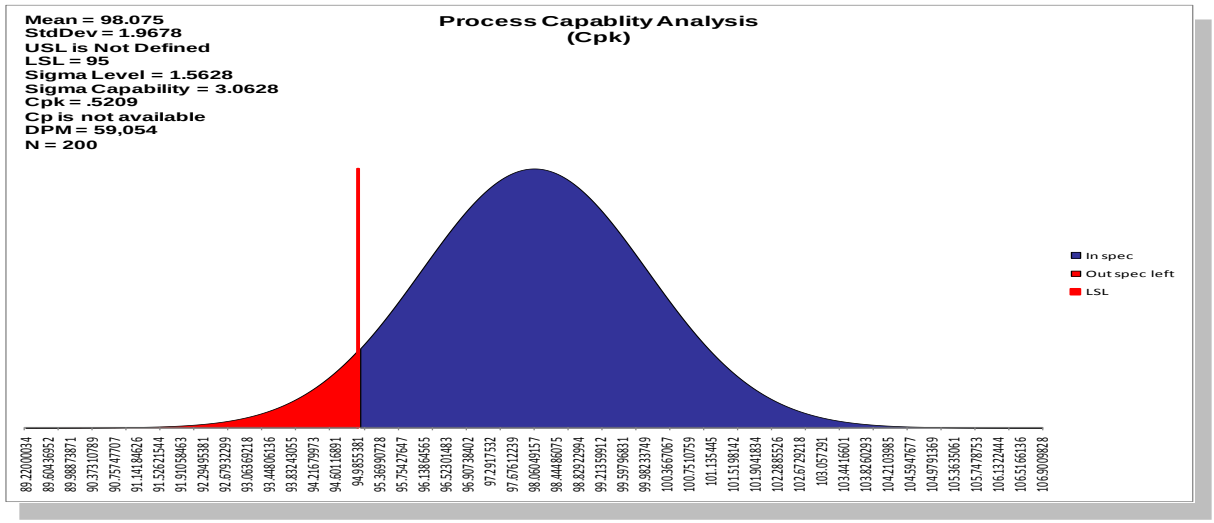

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Figure 3-4 - Process Capability Diagram

It is important to note that SPC methods may identify the need for corrective action, even though a process is delivering "compliant" products and services.

The CA SDU uses SPC-XL (an Excel add-on) as the primary tool for generating Control Charts and Capability Diagrams.

3.4 XEROX Associated SOWs

Table 3-1 - Associated SOWs

SOW#	CATEGORY	SUBCATEGORY	REQUIREMENT TEXT	SOURCE REFERENCE
SR 5.3.39-1	OP - Operations	GEN - General	The SP shall develop and implement quality assurance activities throughout the contract term to include, but not limited to:	Project Charter, Goal Set 5

			1) Data and image sampling methodology	
SR 5.3.39-3	OP - Operations	GEN - General	The SP shall develop and implement quality assurance activities throughout the contract term to include, but not limited to: 3) Identifying and implementing corrective actions	Project Charter, Goal Set 5

4 QUALITY MANAGEMENT PROCESSES

This section describes the quality processes that are used to manage delivered product and service quality.

4.1 Quality Reponses

Quality management processes will generally drive some form of response when problems or improvement opportunities are detected. Generally, these responses will include one or more of the following categories. Quality responses are discussed here to promote alignment regarding the purpose of each response type. Although the responses are fundamentally different, they are frequently used interchangeably, so it is critically important to clarify the responses before discussing quality processes.

1) **Correction** – Action to correct defective service delivery items (e.g., correct a transition processed in error, correct a report, etc.). Defective items may be detected internally (by inspection) or externally (by customers). Corrections do not address problem causation.

2) **Workaround** – Temporary actions to enable the continuation of service delivery operations when there are significant risks of future non-conformities or service loss. Examples of workarounds might include adding temporary resources to increase capability, implementing alternative methods that bypass problem processes, or adding additional checks and controls designed to detect risks. In all cases, workarounds are temporary measures that are not managed by the Change Management Process. Workarounds do not address problem causation.

3) **Corrective Actions** – Actions to prevent the reoccurrence of non-conformities or performance issues by identifying and eliminating root causes. Corrective Actions involve permanent changes to Service Delivery Processes (i.e., methods, technology or workforce) to address future performance. Corrective Actions are conducted via the Production Incident Resolution Process, which leverages the Change Management Process for implementing process changes – which may be addressed in one of two ways:

   - Emergency Changes – are changes that must be implemented quickly, before the determination of root causes. Emergency corrective actions are managed by the Change Management Process on an accelerated basis.
   - Normal Changes – are changes that are performed after problem causation has been determined. Normal changes are managed by the Change Management Process on a normal basis, applying the full rigor appropriate to the changes involved.

   It is possible that corrective action to resolve an operational problem may involve both emergency and normal changes.

4) **Improvement Actions** - Actions to prevent potential non-conformities or performance issues, or to improve operational performance levels by identifying and eliminating root causes or constraints. Improvement actions involve permanent changes to Service Delivery Processes (i.e., methods, technology or workforce) to address future performance. Improvement actions are conducted via the Continuous Improvement Process, which leverages the Change Management Process for implementing process changes.

The first 3 quality responses (Corrections, Workarounds and Corrective Actions) are governed by the Production Incident Resolution (PIR) process. The 4th response, Improvement Actions, is governed by the Continuous Improvement Process (CIP). Both the PIR and CIP use the Change Management Process (CMP) to handle the development and implementation of changes. The PIR, CIP and CMP are described extensively later in this section.

4.2 Core Operational Quality Management System

Figure 4-1 (Core Operational Quality Management System) provides a systems view of the quality processes that comprise the core CA SDU Quality Management System (QMS). The system is highly integrated, with each core process playing a key role in sustaining and/or improving delivered product and service quality.

- All of the core quality processes are components of the OMS framework. The OMS process identifier is included in Figure 4-1 to clarify the linkages to OMS.
- The core quality processes build on the Measurement and Controls framework that was discussed in section 3. The linkages between the core quality processes and the Measurement and Controls framework are identified in Figure 4-1 as well.

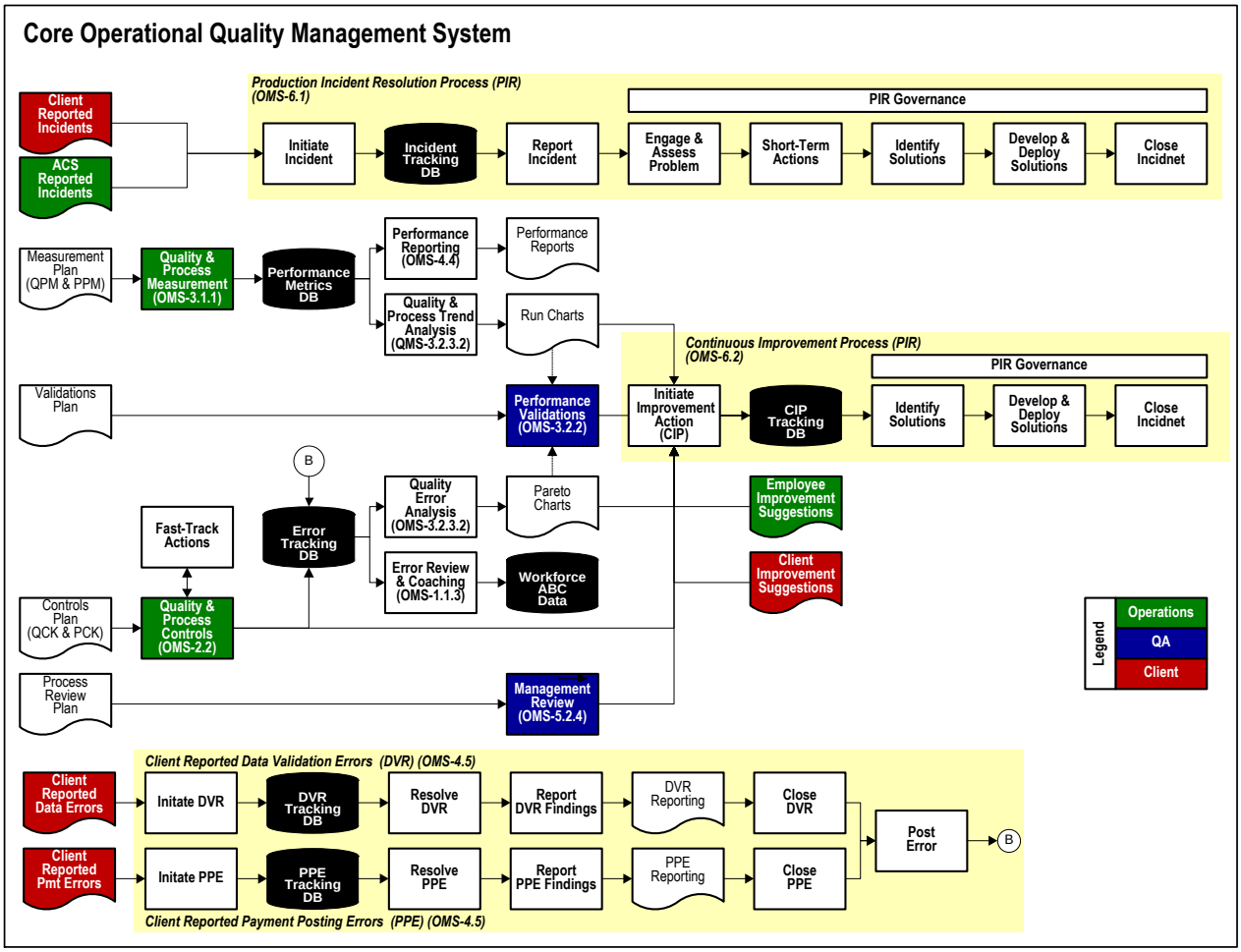

Figure 4-1 - Core Quality Management System Overview

4.2.1 Production Incident Resolution Process (OMS-6.1)

The Production Incident Resolution Process (PIR) responds to situations that are demonstrably impacting service delivery results or capability – where:

a) Service delivery results – include situations that have resulted in the production and/or delivery of multiple service delivery items (e.g., checks, payments, etc.) that do not conform to internal or external standards and warrant formal resolution and/or tracking.

b) Service delivery capability – includes situations that impact production capability or capacity to the extent that compliance to performance standards is put at risk or operational performance levels are significantly degraded

The Production Incident Resolution process includes the methods used to receive and resolve operational service delivery incidents or problems by describing how they are: 1) identified and recorded, 2) evaluated to determine resolution methods, 3) resolved using appropriate processes and tools, and 4) tracked and reported. The PIR is described in more detail in Section 4.3.1 (Production Incident Resolution Process). [SR 5.3.34-1] [SR 5.3.39-3]

4.2.2 Quality & Process Measurement (OMS-3.2.1)

Quality and Process Measurement examines post-production quality and process results to determine the degree of compliance to established performance standards (comparable to traditional Quality Assurance).

Quality and Process Measurement includes the Quality Performance Measurements (QPMs) and Process Performance Measurements (PPMs) defined for each Service Delivery Process. Measurements may include entire populations or samples of populations to determine performance levels. When sampling is used, sample designs and confidence levels are described in the relevant SDP Measurement Plans. [SR 5.3.34-0, SR 5.3.34-1] [SR 5.3.39-1 & SR 5.3.39-2]

Generally, quality and process measurement results data are system supplied and recorded in the Operations Metrics Database (OMD) for subsequent analysis and reporting applications.

4.2.3 Performance Reporting (OMS-4.5)

Performance Reporting prepares and distributes scheduled or ad-hoc reports, as required. Reporting schedules are administered by the QA organization to assure that all reports are produced on time and accurately. Client reports are outlined in greater detail in section 6, Quality Data & Reporting Requirements.

4.2.4 Quality & Process Trend Analysis (OMS-3.2.3.1)

Quality & Process Trend Analysis uses the QPM and PPM results data collected by the Quality and Process Measurement process (described in section 4.2.2. above) to evaluate long-term performance trends and patterns to identify potential performance improvement needs or opportunities. [SR 5.3.34-0, SR 5.3.34-1]

Trend analysis is generally performed on a weekly to monthly basis to identify significant trends or patterns that indicate the need for either corrective or improvement action. Analysis will involve one or more of the following tools:

a) Run Charts – may be used to evaluate time-series data to determine the presence of significant trends or patterns that indicate possible actions.

   A note about trend analysis using run charts – While it is intuitive to look for trends in performance results, it is important to consider that trends (up or down) may simply be reflections of common-cause variation and without significant meaning. The occurrence of special-cause variation is a statistically reliable signal that a process has changed in a significant way.

c) Control Charts – may be used to determine the relative stability of the underlying processes. Control charts tell us if processes are in a state of "statistical control". Out of control conditions signal the presence of "special cause" variation.

d) Capability Charts – may be used for processes that are "in control" to determine the "capability" of the underlying processes to meet performance requirements. Capability is a statistical predictive indicator and is generally expressed as a capability percentage (e.g., a process is 98% capable).

When analysis results signal the need for a process improvement action the Continuous Improvement Process will be engaged (see next section).

4.2.5 Continuous Improvement Process (OMS-6.2)

The Continuous Improvement Process (CIP) responds to identified improvement needs. Improvement needs may be identified via a variety of sources – including upstream quality and process analysis or audit processes, employee or client suggestions, or in response to organizational performance goals

The CIP includes the methods used to receive and prioritize improvement requests, initiate and manage improvement actions, identify root-cause based solutions, and develop, deploy and validate solutions. The CIP is described in more detail in Section 4.3.2, Continuous Improvement Process. Quality & Process Control (OMS-2.2)

Product Quality Controls (QCKs) and Process Control Checks (PCKs) are performed by operations personnel during process operations in accordance with Control Plan schedules and specifications. Observed values are compared with the Control Standards, and non-conformities addressed "in flight" based on defined Response Plans. Product non-conformities are generally addressed via Correction responses, while process non-conformities are addressed via Corrective Action responses. [SR 5.3.34-0, SR 5.3.34-1] [SR 5.3.39-2 & SR 5.3.39-3]

Identified errors will be recorded and maintained to enable subsequent Error Review and Coaching (OMS-1.1.3) and Quality Error Analysis (OM-3.2.3.2).

4.2.6 Quality Error Analysis (OMS-3.2.3.2)

Identified errors are reviewed periodically by operations and/or Quality Assurance personnel to identify improvement opportunities. Error analysis generally involves the use of multi-order Pareto analysis of error tracking data to determine if leveragable patterns exist. Identified opportunities are passed to the Continuous Improvement Process for formal consideration and possible action. [SR 5.3.34-0, SR 5.3.34-1] [SR 5.3.39-3]

4.2.7 Quality Error Review & Coaching (OMS-1.1.3)

Quality errors linked to human error are reviewed with the involved employees as part the Activity Based Compensation (ABC) program. ABC Quality Reviews systematically review errors with employees and provide coaching to mitigate future reoccurrences. Confirmed errors also impact employee compensation rates as part of the ABC program to incent quality performance.

4.2.8 Performance Validations (OMS-3.2.2)

Performance Validations are performed by Quality Assurance personnel to validate key Service Delivery Process practices and results. Validations include: Process Performance Valuations (PPV), Operational Control Validations (OCV), and SOW / SR Validations (SRV). Validation schedules and procedures are defined in the SDP Validation Plan for each SDP. See section 3.1.4 for additional information regarding Performance Validations. [SR 5.3.34-1] [SR 5.3.39-3]

4.2.9 Process Reviews (OMS-5.2.4)

Process Reviews are performed by Quality Assurance personnel to confirm: 1) process designs effectively and efficiently meet quality requirements and performance goals, 2) deployment methods and actions are effective, and 3) processes are operating efficiently. Process Reviews are conducted at the work process level on an annual basis. See section 3.1.5 for additional information regarding Process Reviews. [SR 5.3.34-1] [SR 5.3.39-3]

4.2.10 Operating Standards Management (OMS-5.2)

Operating Standards Management establishes policies for developing and maintaining operational policies, procedures and instructions, setting and maintaining operational accountabilities, and conducting periodic process reviews to confirm the continued effectiveness of operational processes and supporting documentation. Process Reviews are facilitated by Quality Assurance personnel to confirm that process designs continue to meet quality requirements and performance goals, that deployment methods and actions are effective, and that processes are operating efficiently. Review assignments and schedules are defined in SDP Process Review Plan for each SDP. See section 3.1.5 for additional information regarding Process Reviews.

4.2.11 Data Validation Reporting Errors (OMS-4.4)

DCSS identified data validation findings are handled via the Data Validation Reporting (DVR) process to assure: 1) corrective action responses are properly determined and applied, 2) findings are processed using proper evaluation and response practices and 3) findings are included in Quality Error Analysis process described in section 4.2.7 to determine process improvement needs. [SR 5.3.36]

XEROX will always strive to resolve data validation findings as soon as possible, but not longer than one month from receipt from DCSS. The Data Validation Process is documented via SOP OM-6.1.2.1., and a process overview is included below [SR 7.1.11]

DVR Process:

Step 1 – DCSS forwards LCSA validation findings to XEROX (CASDU.Validation.Reports@conduent.com)

Step 2 – The XEROX Quality Assurance team reviews and logs the validation findings.

Step 3 – The Xerox QA team ensures each validation finding is researched and corrective actions are taken as necessary.

Step 4 – The Xerox QA team logs findings and actions for each DVR.

Step 6 – The Xerox QA team provides DCSS with a monthly Validation Error Summary and Closed Validation Errors Detail Listing. The Summary report summarizes key metrics (including the number of validation errors received, verified, closed, and open) and the Closed Errors report details the errors closed during the month. Data Validation Error reports are described in section 5, Quality Reporting.

4.2.12 Payment Posting Errors (OMS-4.4)

DCSS identified payment posting errors are handled via the Payment Posting Error (PPE) process to assure: 1) corrective action responses are properly determined and applied, 2) findings are processed using proper evaluation and response practices and 3) findings are included in Quality Error Analysis process described in section 4.2.7 to determine process improvement needs. [SR 5.3.36]

XEROX will always strive to make the determination of responsibility for payment posting errors as soon as possible, but not longer than one month from receipt from DCSS. [SR 7.1.11] A PPE process overview is provided below.

PPE Process:

Step 1 – DCSS forwards researched payment posting errors to XEROX. (CA SDU.Posting.Error.Reports@conduent.com), including a request for a XEROX responsibility statement.

Step 2 – The XEROX Quality Assurance team reviews and logs the PPE.

Step 3 – The XEROX QA team ensures each reported PPE is researched and corrective actions are taken as necessary.

Step 4 – The XEROX QA team logs findings and actions for each PPE.

Step 5 – The XEROX Operations Manager responds to DCSS with a responsibility statement (either accepting responsibility for the financial cost, or explaining that it is not a CA SDU error).

Step 6 – DCSS forwards the invoice for PPE errors to XEROX.

Step 7 – The XEROX financial manager and QA team and reconcile the monthly PPE invoice with the XEROX PPE log, and confirm with DCSS. Problem Resolution & Improvement Management

4.3 Problem Resolution & Improvement Management

4.3.1 Production Incident Resolution Process (OMS-6.1)

As mentioned in section 4.2.1, the Production Incident Resolution (PIR) process is the vehicle used for receiving and resolving production incidents. Figure 4-2, below, provides a high-level view of the PIR process.

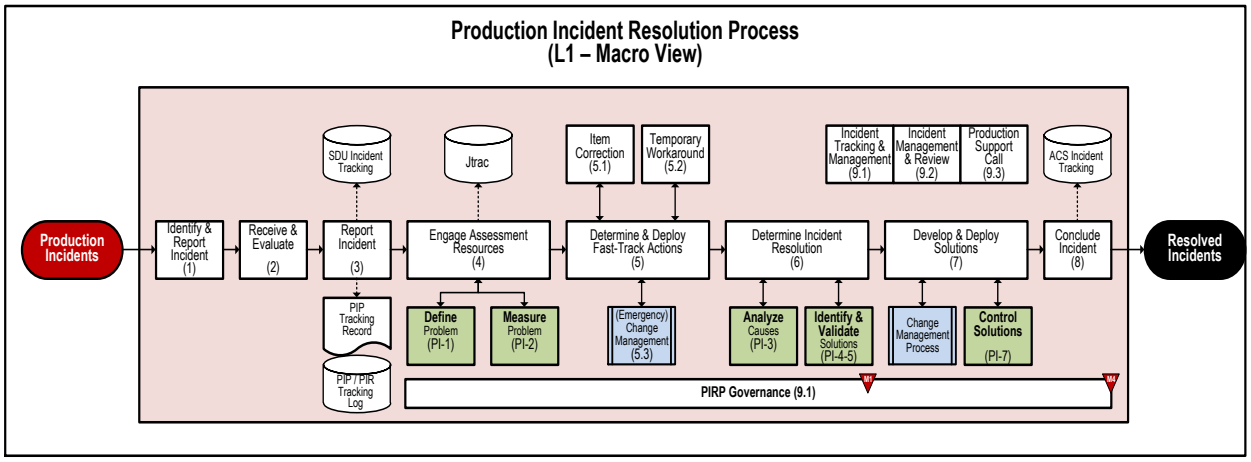

Figure 4-2 - Production Incident Resolution Process (PIR)

The PIR process is an 8 step process that begins with the identification of a production issue or incident that requires resolution and ends with resolution. An additional 9th step includes the support processes required to track, report and manage incidents.

The PIR is described in detail in OPS 005 (CA SDU Problem Resolution Management Plan) and in Standard Operating Procedure OM-6.1.1.1 (Production Incident Resolution Process). However, the following features warrant explanation in this document.

- DMAIC-based problem solving is integrated within the PIR process (as noted by the steps shaded in green in figure 4-2). DMAIC stands for Define, Measure, Analyze, Improve and Control, and is the core Six Sigma improvement methodology used to identify root-cause based solutions to problems.
- Fast-Track Actions – Corrections, Workarounds and Emergency Changes are fast-track responses that may be taken to address near-term response needs. Corrections include actions to eliminate presenting non-conformities, while Workarounds are temporary actions to enable the continuation of processing

when there is a significant risk of non-conformity or service loss. Neither corrections nor workarounds address problem causation or long-term resolution. Emergency Changes include changes that must be implemented before the full determination of causation has occurred due to do urgent deployment requirements.

- PIR Governance - The PIR process is governed by a CA SDU OMS Governance Council established by the CA SDU Program Manager. The council will meet weekly: 1) to review problem resolution actions at key process milestones to assure work is progressing properly and expeditiously, and 2) review problem resolution actions that are experiencing difficulties and may warrant management review and/or possible intervention.
- PIR Tracking Record - The PIR Tracking Record is used to guide and document problem resolution work as it progresses through the PIR process. The PIR Tracking Record includes governance review steps at key points to assure problem resolution work is performed effectively and timely. A copy of the PIR Tracking Record is included in Appendix 8.7 – Production Incident Resolution Tracking Record.
- Change Management – all changes identified by the PIR process are developed and deployed using the CA SDU Change Management Process. The Change Management Process is documented in more detail in section 4.3.4 of this plan.

4.3.2 Continuous Improvement Process (OMS-6.2)

As mentioned in section 4.2.5, the Continuous Improvement Process (CIP) process is the vehicle for conducting process improvement actions. Figure 4-3, below, provides a high level view of the CIP.

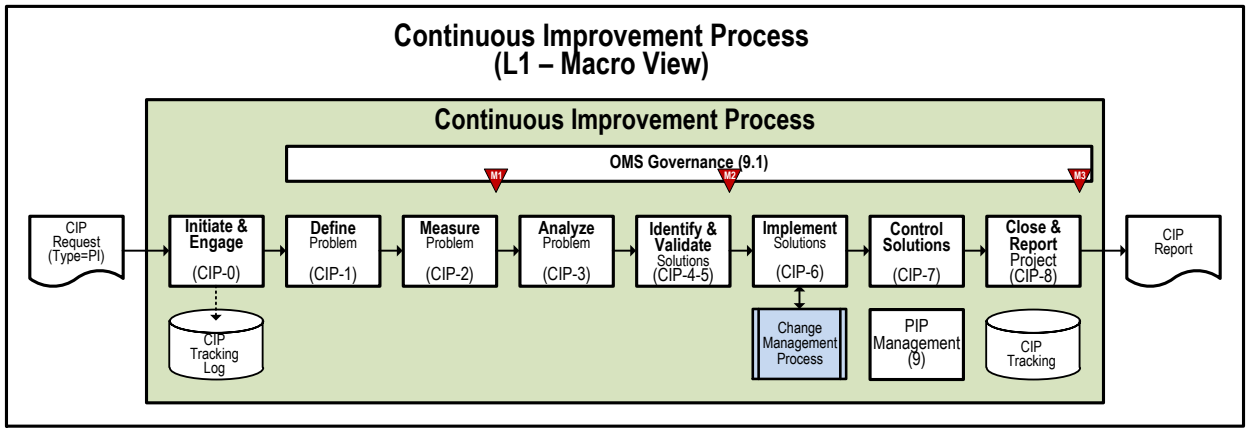

Figure 4-3 - Continuous Improvement Process (CIP)

The CIP process is an 8 step process that begins with the identification of a production issue or incident that requires resolution and ends with resolution. An additional 9th step includes the support processes required to track, report and manage improvement work.

The CIP is described in detail in Standard Operating Procedure (SOP) OM-6.2.1 (Continuous Improvement Process). The SOP sets key polices, identifies supporting references and tools, and outlines detailed instructions for CIP operation – including step level responsibility assignments.

Key features of the CIP include:

a) A DMAIC-based improvement methodology is integrated within the CIP. The Improvement Methodology, which is described in more detail in section 4.3.3, is an 8 step methodology designed to conduct fact-based, root-cause focused problem solving. Root cause identification and validation is addressed via steps 3.1- 3.3 in the methodology. [SR 5.3.34-2]

b) CIP Governance - The CIP process is governed by a CA SDU OMS Governance Council established by the CA SDU Program Manager. The council will meet weekly: 1) to review improvement actions at key process milestones to assure work is progressing properly and expeditiously, and 2) review improvement actions that are experiencing difficulties and may warrant management review and/or possible intervention.

c) CIP Tracking Record - The CIP Tracking Record is used to guide and document improvement work as it progresses through the CIP. The CIP Tracking Record includes governance review steps at key points to assure improvement work is performed effectively and timely. A copy of the CIP Tracking Record is included in Appendix 8.8 – Continuous Improvement Project Tracking Record.

d) Change Management – all changes identified by the PIR process are developed and deployed using the CA SDU Change Management Process. The Change Management Process is documented in more detail in section 4.3.4 of this plan.

Improvement needs may be identified via a variety of processes or sources – including, but not limited to the improvement drivers identified in Figure4-3, below. [SR 5.3.34-1

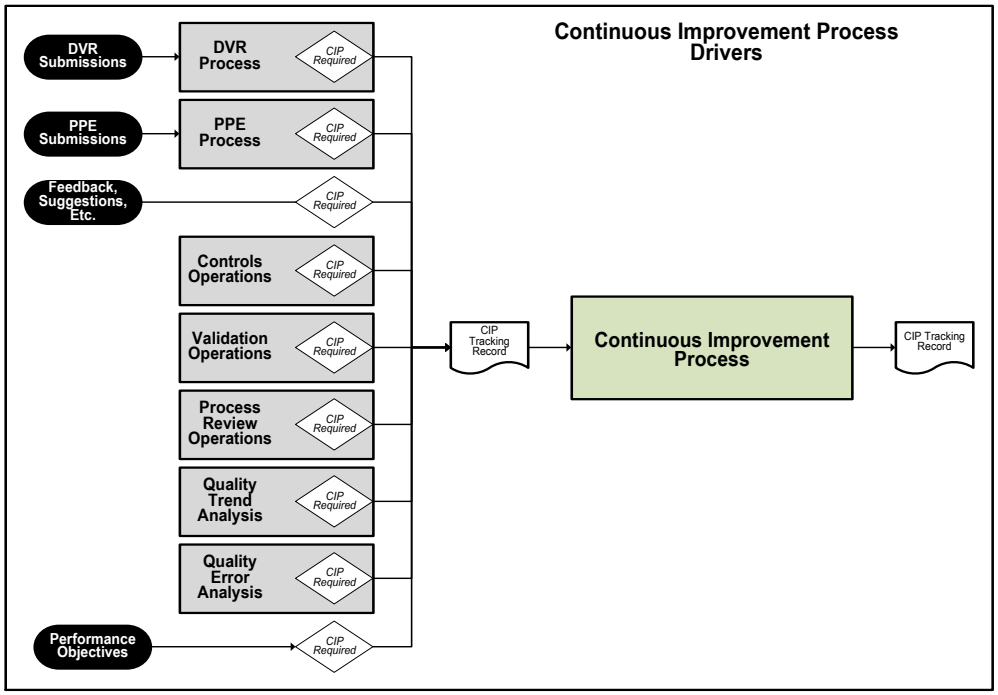

Figure 4-4 - Continuous Improvement Process Drivers

DCSS identified improvement suggestions will be forwarded to the Quality Manager, who will initiate the CIP Tracking Record to engage the CIP process. DCSS personnel will be encouraged to participate in the resulting improvement action to determine appropriate solutioning. Mutually agreed upon solutions resulting from joint participation in the CIP will be planned and implemented via the process. [SR5.3.34-3] [SR5.3.35]

4.3.3 Problem and Improvement Management (OMS-6.3)

Problem and Improvement Management Governance

The PIR and CIP processes both leverage the CA SDU OMS Governance Council to provide ongoing management oversight. As mentioned previously, the council will meet weekly: 1) to review improvement actions at key process milestones to assure work is progressing properly and expeditiously,

and 2) review improvement actions that are experiencing difficulties and may warrant management review and/or possible intervention.

Problem and Improvement Management Process Ownership

The XEROX Quality Manager is the Process Owner for the PIR and CIP processes – and is responsible for developing, maintaining and deploying all operational documentation and tools, and for facilitating governance operations.

Problem and Improvement Methodology

The Production Incident Resolution process and Continuous Improvement Process both leverage Six Sigma DMIAC methodology to conduct fact based, root cause focused problem solving. The core improvement methodology incorporates an 8 step approach that identifies and validates root causes to problems, and identifies and validates solutions. The core methodology is preceded by an Initiation step that initiates the CIP/PIR tracking record and governance process, and ends with a Closeout step to finalize CIP/PIR administration. Step 5, Validate Solutions and Step 7, Control Solutions are integral to confirming that solutions meet performance expectations. [SR 5.3.34-1, SR 5.3.34-4]

Appendix 8.10 includes a copy of the Improvement Methodology.

4.3.4 Change Management Process (OMS-7)

Both the PIR and CIP processes develop and deploy changes using the Change Management Process (CMP). Figure 4-4, below, provides a high level view of the CMP.

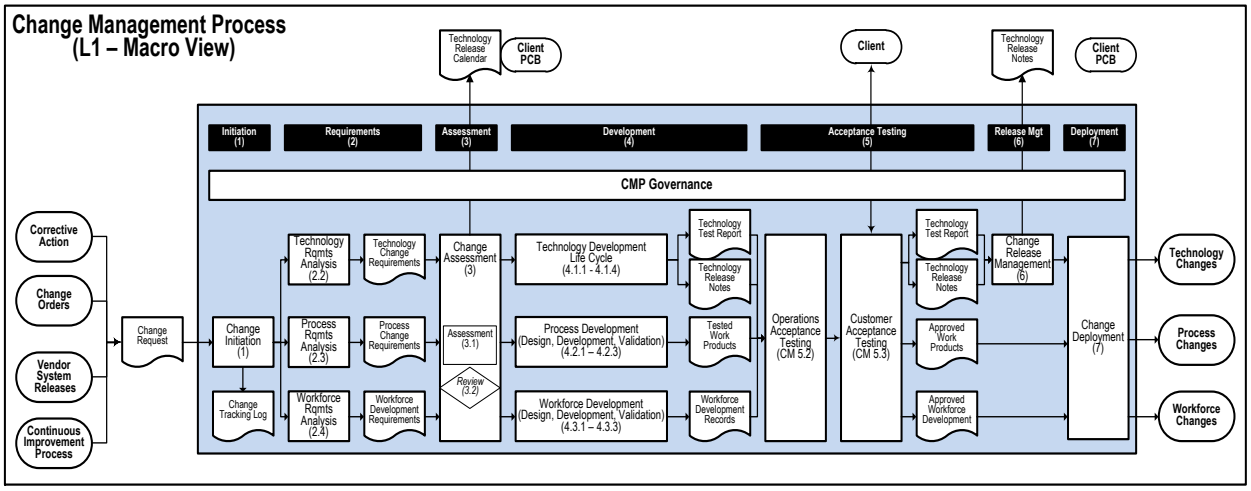

Figure 4-5 - Change Management Process (CMP)

The CMP is described in detail in Standard Operating Procedure OM-7.1.1 (Change Management Process). Key features of the CIP include:

a) Tracking Record - The Change Request and Tracking Record is used to guide and document change work as it progresses through the CMP. A copy of the CIP Tracking Record is included in Appendix 8.8 – Change Request and Tracking Record.

b) CMP Governance - The CMP is governed by the CA SDU CCB process. The CA SDU CCB, under the leadership of the CCB Chair, meets weekly to monitor and manage all in-flight changes.

4.4 Support Processes

This section briefly introduces the non-core support process areas that comprise the balance of the deployment stage 1 processes. Level 1 certification will be pursued when all stage one processes had

enough time to become sufficiently mature and develop the performance history required to enable a meaningful certification audit. Process areas are identified by OMS level, working from level 5 down.

4.4.1 System Management Processes (OMS Level 5)

System Management (OMS level 5) processes are chartered with assuring overall OMS effectiveness and sustainability and driving continuous improvement.

1) Operations Quality System Management (OMS-5.1)

Operations Quality System Management is an OE Roadmap step 3 process that establishes polices for developing and maintaining a documented quality policy and quality manual, and for provisioning of quality management personnel. The XEROX CA SDU quality policy was included in section 2.2.

4.4.2 Client Relationship Management Processes (OMS Level 4)

Customer Relationship Management (level 4) processes chartered with assuring alignment with clients and customers regarding requirements and performance results, listening to clients and customers, and providing client services and access, and reporting.

1) Client Requirements Management (OMS-4.1)

Client Requirements Management is an OE Roadmap step 3 process area that manages contractual and non-contractual requirements and expectations. OMS will leverage the XEROX Configuration Management Plan to receive new or revised requirements and to evaluate them as part of the Change Request Process (see section 3.5 in the Confirmation Management Plan).

When new or changed requirements impact quality performance requirements, the review process will operationally define the impacted performance requirements for translation for the appropriate measurement and control plans. Measurement and control plan revisions will trigger adjustments to relevant operational documentation.

2) Client Servicing & Access (OM-4.2)

Client Service and Access is an OE Roadmap step 3 processes area that addresses the processes used to facilitate client servicing access, shared information management, and client servicing review.

3) Client & Customer Listening (OMS-4.3)

Client and Customer Listening is an OE Roadmap step 3 process area that addresses the establishment and operation of the listening approaches required to facilitate effective and timely feedback from clients and customers.

4) Client & External Auditing (OM-4.4)

Client and External Auditing is an OE Roadmap step 3 process area that addresses the processes required to facilitate external audits, receive and process audit findings, and use audit results to drive continuous improvement.

Core QMS Processes

Two sources of DCSS supplied audit or feedback information were addressed in conjunction with the core operational QMS processes. These were:

1) DCSS Reported Data Validations - where XEROX will receive, evaluate, address, track and report DCSS reported data validation errors via the Data Validation Process outlined in section 4.2.11, Data Validation Reporting Errors.

2) DCSS Reported Payment Posting Errors – where XEROX will receive, evaluate, address, track and report DCSS reported payment posting errors via the Payment Posting Error management process outlined in section 4.2.12, Payment Posting Errors.

External Audits

External audit results will be evaluated to determine corrective action needs.

Identified corrective action needs will be managed via the XEROX PIR process to assure: 1) corrective actions are effectively managed, 2) solutions are determined via established problem solving methods, and 3) DCSS is kept informed of resolution plans and status via established reporting methods. Audit findings handled in this way will be coded in the PIR Process so they are identified separately, when needed.

Recurring reporting to DCSS regarding corrective actions stemming from audit findings will be facilitated via the reporting mechanisms established by the XEROX Problem Resolution Process. In this way, DCSS will have clear visibility to corrective action efforts and status.

Corrective actions related to audit findings are tracked via the Improvement Project Log so that all active projects are viewable by appropriate stakeholders. Moreover, each project is tracked via the Improvement Project Record to track key details at the project level.

4.4.3 Quality Management Processes (OMS Level 3)

The following are the OMS Quality Management (level 3) process areas that address the development and operation of quality measurements, operational controls and validations, performance analysis, and internal measurement system calibration.

1) Quality Requirements Deployment (OMS-3.1)

Quality Requirements Deployment is an OE Roadmap step 3 process area that manages the allocation of client requirements to products and services, the establishment of related quality performance measurements, and the establishment of quality validation processes.

4.4.4 Controls Management Processes (OMS Level 2)

No OMS Quality Management (level 2) process areas are formally included in deployment stage one.

4.4.5 Standards Management Processes (OMS Level 1)

1) Service Delivery Process Inventory (OMS-1.2.2.1)

Service Delivery Processes are defined during implementation planning and documented in various contract deliverables – including this deliverable. Service Delivery Process performance requirements are translated to SDP Measurement Plans in OE Roadmap step 3 via Requirements Deployments processes (see section 4.4.3)

2) Service Delivery Process Operational Standards (OMS-1.2.2.3)

The Standard Operating Procedures (SOPs) and Operational Work Instructions (OWI) required to perform operational processes are developed in OE Roadmap step 2, during implementation. Related training content is developed and delivered in OE Roadmap step 2 as well. Client reviews and approvals are secured for all operational documentation and training materials.

3) Vendor Service Provision Management (OMS-1.2.3.3)

The Standard Operating Procedures (SOPs) and Operational Work Instructions (OWI) required to manage vendor service provisioning are developed in OE Roadmap step 2, during implementation.

4.5 Associated SOWs

Table 4-1 - Associated SOWs

SOW#	CATEGORY	SUBCATEGORY	REQUIREMENT TEXT	SOURCE REFERENCE
SR 5.3.34-1	OP - Operations	GEN - General	The SP shall monitor operational activities throughout the contract term and implement process improvement activities to include, but not limited to: 1) Identify opportunities for process improvement (including data integrity)	Project Charter, Goal Set 9
SR 53.34-2	OP - Operations	GEN - General	The SP shall monitor operational activities throughout the contract term and implement process improvement activities to include, but not limited to: 2) Identify possible solutions for process improvements	Project Charter, Goal Set 9
SR 5.3.34-3	OP - Operations	GEN - General	The SP shall monitor operational activities throughout the contract term and implement process improvement activities to include, but not limited to: 3) Implement process improvements as agreed to between the SP and DCSS	Project Charter, Goal Set 9
SR 5.3.34-4	OP - Operations	GEN - General	The SP shall monitor operational activities throughout the contract term and implement process improvement activities to include, but not limited to: 4) Monitor and evaluate effectiveness of process improvements	Project Charter, Goal Set 9
SR 5.3.35	OP - Operations	GEN - General	The SP shall incorporate DCSS suggestions for process improvement as agreed to between the SP and DCSS.	Project Charter, Goal Set 9
SR 5.3.36	OP - Operations	GEN - General	The SP shall manage data validation findings provided by the State consistent with the CA SDU Quality Assurance Plan.	Project Charter, Goal Set 4
SR 5.3.39-1	OP - Operations	GEN – General	The SP shall develop and implement quality assurance activities throughout the contract term to include, but not limited to: 1) Data and image sampling methodology	Project Charter, Goal Set 5
SR 5.3.39-2	OP - Operations	GEN – General	The SP shall develop and implement quality assurance activities throughout the contract term to include, but not limited to: 2) Recording and publishing results and findings	Project Charter, Goal Set 5
SR 5.3.39-3	OP - Operations	GEN – General	The SP shall develop and implement quality assurance activities throughout the contract term to include, but not limited to: 3) Identifying and implementing corrective actions	Project Charter, Goal Set 5
SR7.1.10	SL – Service Level Standard	GEN - General	The SP shall make corrections to deficiencies found through any audit in the agreed upon timeframe.	Project Charter, Goal Set 4
SR7.1.11	SL – Service Level Standard	GEN - General	The SP shall complete corrections to all State reported data validation errors within 1 month of notification.	Project Charter, Goal Set 4

5 QUALITY MANAGEMENT DEPLOYMENT

This section outlines the approaches for developing, deploying and operating the operational quality processes identified in section 4.2 (Core Operational Quality Management System) to the service delivery processes identified in section 1.2.2 (Plan Scope). These processes are further defined below:

1) **Collections** - Collections involves receiving, posting and depositing of paper and electronic payments. Key work processes comprising collections include: 1) receive and sort mail, 2) open and scan mail, 3) data collection and perfection, 4) pass 2 endorsement and sorting, 5) document management, 6) debit processing (paper and electronic), 7) credit processing (paper and electronic), 8) balancing, reconciliation and deposit, and 9) ICL creation.

2) **Exceptions** - Exceptions includes the family of work processes required to handle problematic transactions – including: 1) researching unidentified payment items, 2) suspense management, 3) returned disbursements, 4) misapplied payments and 5) bad check resolution.

3) **Disbursements** - Disbursements involves the disbursement of payments to authorized recipients via paper check or electronic methods. Check disbursement processing includes the printing, insertion and mailing of checks. Electronic disbursements are performed via direct deposit or the funding of electronic payment cards.

4) **Customer Service** - Customer Service provides a range of services to program stakeholders – including the Electronic Help Desk (to receive and resolve inquiries and issues), enrollments processing (DD and EPC), Non-IV-D case initiation and updates, and supporting Web and IVR services

5) **Systems** – Systems includes the technical processes required to support overall operations, including online systems availability, data file transfers, and system and data backups.

5.1 Install Operational Measurements & Controls

5.1.1 Process Measurements

With support from the Quality Assurance team, each operational area (department) will identify and operationally define the Quality Performance Measurements (QMPs) and Process Performance Measurements (PPMs) that will be used to track the performance of the Service Delivery Processes and/or component work processes they support. Key steps for developing and deploying process and quality measurements include:

1) Determine Quality Performance Measurements – involves translating key client quality requirements to QPMs.

2) Determine Process Performance Measurements – involves translating CA SDU process performance goals to PPMs.

3) Operationally define Measurements – involves completing the definitional items included in the Measurement Plan template for each identified measurement.

4) Conduct Measurements – Quality and Process measurements are to be conducted by operational personnel in accordance with the schedules and methods defined in Measurement Plans. Measurement ownership and operational documentation are identified in Measurement Plans to assure accountabilities are clearly established

- Note – quality and process performance measurement results are periodically validated by QA (see Performance Validations in sections 3.1.4 and 6.1.3).

5.1.2 Process Controls

With support from the Quality Assurance team, each operational area (department) will identify and operationally define the Quality Control Checks (QCKs) and Process Control Checks (PCKs) that will be used to manage performance of Service Delivery Processes and/or the component work processes they support. Key steps for developing and deploying quality and process controls include:

1) Determine Controls – involves translating key client quality and performance requirements to QMPs and CA SDU business goals to PPMs.
2) Operationally define Controls – involves completing the definitional items included in the Control Plan template for each identified control.
3) Conduct Controls – Controls are to be conducted by operational personnel in accordance with the schedules and methods defined in Control Plans. Control ownership and operational documentation are identified in Control Plans to assure accountabilities are clearly established.
4) Note – controls operations results and practices are periodically validated by QA (see Performance Validations in sections 3.1.4 and 6.1.3).

5.1.3 Install Performance Validations

The Quality Assurance team will identify the performance validations to be performed for each operational area (department) to validate quality and operational performance. The types of validations that may be performed are described in detail in section 3.1.4 (Performance Validations). Key steps for developing and deploying validations include:

1) Determine Process Performance Validations – involves identifying the validations that will be used to periodically validate QMP and PPM performance relative to the targets established in Process Measurement Plans.
2) Determine Operational Controls Validations – involves identifying the quality and process control checks (QCKs and PCKs) that are to be periodically validated by QA.
3) Determine SR Validations – involves identifying the contractual requirements that are to be periodically validated by QA.
4) Define Validation methods and standards – involves determining validation frequencies, operational instructions, and performance standards for each performance validation.
5) Conduct Validations – Validations are to be conducted by QA in accordance with defined schedules and methods. Identified improvement opportunities will engage the CIP to resolve any process issues.

5.1.4 Install Process Reviews

The Quality Assurance team will identify the Process Reviews to be performed for each operational area (department) to validate continued effectives of process designs and operational practices. The types of reviews that may be performed are described in detail in section 3.1.5 (Process Reviews). Key steps for developing and deploying process reviews include:

1) Determine Process Reviews – involves identifying the process reviews that will be used to periodically validate process design and operational effectiveness.
2) Set Process Review schedules – involves determining and documenting review schedules in the appropriate Process Review plans.

3) Conduct Reviews – Reviews are to be conducted by QA in accordance with defined schedules and standardized review criteria. Identified improvement opportunities will engage the CIP to resolve any process issues.

5.2 Manage Quality and Process Performance

5.2.1 Internal Performance Reviews

Daily Scorecard Review

The CA SDU Management team will review key operational metrics on a daily basis to keep abreast of volumetric and performance results - using a Daily Operational Scorecard prepared by the Quality Assurance team. Metric owners will identify and alert the team to any results that warrant consideration or action. The scorecard will include a rolling 5 day daily detail and weekly summary to enable day over day comparisons and short-term trend analysis.

Performance Report Outs

Metrics owners will perform "report outs" on a regularly scheduled basis to interpret and share performance profiles for key performance metrics with the CA SDU management team. Report outs will use run charts (instead of tabular data) to enable facilitate identification and understanding of performance trends and patterns (e.g., runs, trends, shifts, oscillation, etc.). "Report outs" promote meaningful ownership of performance results.

5.2.2 Performance Reporting

Quality reports will be prepared and distributed to relevant stakeholders as described in section 6.2, Quality Reporting.

5.2.3 Process Capability Analysis

As mentioned in section 4.2.4 (Quality and Process Trend Analysis), run charts will be used to confirm processes are operating within acceptable ranges, and to identify trends or patterns that warrant additional investigation or improvement action.

The Quality Assurance team will translate key QPMs and PPMs to time-series run charts to help metric owners monitor process performance. Metrics owners will review and interpret run charts and a regular basis and conduct report outs as scheduled to share results with the CA SDU management team.

When warranted, the Quality Assurance team will translate run chart data to SPC Control Charts and Capability Charts to determine if processes are demonstrating statistical control and capability. Out of control signals or insufficient capacity results will drive CIP actions.

5.2.4 Error Analysis

Error Review & Coaching

Product or process errors may be identified via various methods (including internal control operations or external reports). Regardless of the find method or source, identified errors will be evaluated by the appropriate management team member (process owner or supervisor) to: 1) confirm errors, 2) determine error failure mode (i.e., what failed), and 3) assign error causation (i.e., why failure modes occurred).

When identified error causes are associated with workforce (processors), supervisors will conduct error reviews and coaching with appropriate processors to prevent reoccurrence of errors. Errors associated with execution failure modes are

Error Pattern Analysis

The Quality Assurance team will apply Pareto analysis methods to error find data to determine if leveragable patterns exist for improvement opportunities. Error pattern analysis will be performed when performance capability analysis (see section 6.2.3) indicates the need for improvement action, or when patterns are suspected by supervisors, employees or QA personnel.

5.3 Develop Quality Skills

Quality Skills Development for Quality Assurance Personnel

The QA Manager will expose all QA personnel to the full Quality Auditor Body of Knowledge as defined by the American Society for Quality (ASQ) within 90 days after go-line. The Quality Auditor Body of Knowledge can be referenced via the ASQ website.

QA personnel will be expected to attain Lean Six Sigma certification at the Green Belt level via a credible training and certification program within 6 months of employment. Training and certification may be performed via approved internal or external resources.

Quality Skills Development for Operations Personnel

All operational personnel will receive Basic Quality Training (Quality Boot Camp) with 6 months of operational go live. The training will be conducted by the Quality Manager and will address basic quality and process management principles and practices and introduce the XEROX OMS framework.

5.4 Associated SOWs

Table 5-1 - Associated SOWs

SOW#	CATEGORY	SUBCATEGORY	REQUIREMENT TEXT	SOURCE REFERENCE
None				

6 QUALITY PERFORMANCE & REPORTING REQUIREMENTS

6.1 Quality Requirements

6.1.1 Quality Performance Data Management

Quality data management practices are outlined below:

1) Production Data

Production data are maintained by KidStar and the I3 Call Management system.

2) Quality Audit & Analysis Records

Quality audit records are maintained in various systems and/or manual records. For example, data entry QA queue results are maintained in the KidStar system and call center audit data are maintained in the I3 system. Manual logs, when used, are maintained in a central repository.

3) Quality Results Data

4) The performance results data used to track and manage performance results relative to client and business requirements, and to support quality reporting, are generally maintained in the Operations Metrics Database (OMD).**Corrective Action & Improvement Action Records**

Corrective action and improvement actions are tracked via tracking records that guide and document all actions performed as part of the Production Incident Resolution (PIR) process and the Continuous Improvement Process (CIP).

A sample of the PIR Tracking Record is included in Appendix 8.7, Production Incident Resolution Tracking Record, and a sample of the CIP Tracking Record is included in Appendix 8.8, Continuous Improvement Tracking Record.

Changes resulting from PIR and CIP actions are tracked via the Change Request and Tracking Record, which is included in Appendix 8.9, Change Request and Tracking Record. All tracking records are maintained by action owners in a central repository.

Quality Assurance also maintains a tracking inventory of all PIR and CIP actions to facilitate governance operations.

6.1.2 Quality Requirements Performance Management

The SLAs listed below in Table 6-1 are addressed via the measurement and control framework outlined in Section 3.1 (Measurement & Control Framework), where:

a) SLAs are defined in the appropriate Service Delivery Process (SDP) Measurement Plans (to track and evaluate performance results)

b) Related operational controls are defined in the appropriate SDP Control Plans (to proactively influence performance results)

c) Related validations are defined in the appropriate SDP Validation Plans (to validate performance results and controls operations)

Quality Related SLAs follow:

Table 6-1 - Service Level Agreements (SLAs)

SLA ID	SLA Description	SDP
SR 7.1.1	The SP shall transmit Image Cash Letter deposits to the CTS banks by 3:00 PM Pacific Time on the same day received at the CA SDU.	Collections
SR 7.1.1 a	If not a banking day or if the negotiable instrument is received after 1:00 PM Pacific Time, the deposit shall be made by 3:00 PM Pacific Time the next banking day.	Collections
SR 7.1.2	The SP shall process and transmit all data files to CSE according to the batch schedule.	Collections
SR 7.1.3	The SP shall maintain their assigned daily average of suspended logical collections, in an amount less than or equal to $200,000.	Exceptions
SR 7.1.4	The SP shall open a new Non IV-D case or update an existing Non IV-D case per DCSS defined business rules within 7 business days of receipt of the FL-191 and/or FL-195.	Customer Service
SR 7.1.5	The SP shall mail paper disbursements the same day disbursement instructions become available for processing.	Disbursements
SR 7.1.6	The SP shall transmit electronic disbursements the same day disbursement instructions become available for processing.	Disbursements
SR 7.1.7	Within the agreed upon volumes, the SP's Electronic Help Desk shall close all Electronic Help Desk and State/LCSA Help Desk tickets by the end of the next business day from receipt of the initial call.	Customer Service
SR 7.1.10	The SP shall make corrections to deficiencies found through any audit in the agreed upon timeframe	Quality Management

Customer Service call quality performance is measured in accordance with the QPM metrics defined in the Customer Service Measurement Plan. Measurement involves random selection and evaluation of 2 calls per agent per week by Team Leaders. Evaluation is performed using standard call model criteria, and results are reviewed with agents to provide feedback and coaching. [SR 5.4.25]

6.2 Quality Reporting

6.2.1 Quality Reporting Management

The Quality Assurance team will prepare the quality and performance reports in accordance with established delivery schedules. Quality reports will be produced in PDF format to preserve content integrity and delivered via email provided by DCSS, OPMISOperationsAnalysisUnit@dcss.ca.gov. [SR 5.3.39-2]

The Quality Manger will schedule periodic joint review sessions with appropriate stakeholders to confirm report production and delivery are working effectively, and to review reported results, if warranted.

6.2.2 Quality Reports

The following quality and performance reports are managed within the scope of the Quality Assurance Plan and its component processes.

6.2.2.1 CA SDU Operations Report (Monthly)

The report contains a summary of the monthly collections and disbursements activities that were processed either manually or automatically in the reporting period.

- **Section 1** – summarizes collections activities related to incoming mail received, items processed and items that were not processed for the appropriate reporting period.
- **Section 2** – summarizes banking activities related to deposits, processed payments and insufficient funds payments.
- **Section 3** – summarizes electronic payments (EFT) reversal requests
- **Section 4** – summarizes disbursement activities by checks, Electronic Pay Cars (EPC) and Direct Deposits.
- **Section 5 –** summarizes forms received and processed and all outbound mail
- **Section 6 –** summarizes all Help Desk incoming/outbound calls and escalations
- **Section 7** – summarizes postage charges for outbound mail
- **Section 8** – summarizes Service Level Standard results for the reporting period

6.2.2.2 CA SDU Service Level Attainment Report (Monthly)

The report contains a detailed description of Service Level Attainments (SLAs) as defined in the RFP. Each SLA includes the principles for setting objectives, establishing measurement tools, setting targets, and identifying initiates to achieve the overall quality for that SLA.

6.2.2.3 Data Validation Reporting (Monthly)

DCSS identified validation findings are logged, tracked and reported to DCSS as required. Tracking and reporting data will identify the key information for each finding - including:

- Descriptive Information - including finding description, date identified, reporter and supporting DCSS comments
- Item Identification - identifying the item, submitter, date submitted, case, etc.
- Verification Status - identifying if the finding was verified
- Defect Codes and Classification Attributes - to aid long-term pattern analysis
- Findings - including root cause and tiered classification attributes (e.g., machine error, machine type, machine number) - to enable multi-level Pareto analysis
- Resolution Plans - what will be done, when and by whom
- Resolution Status - actions completed, remaining

XEROX will provide DCSS with a monthly Validation Findings Recap and Closed Validation Findings Detail Listing. The Validation Recap will summarize key metrics (including the number of validation findings received, verified, closed, and open) and the Closed Findings Listing will include the data elements listed above for all items closed during the month. The Closed Item Listing will enable DCSS and XEROX to jointly confirm the effectiveness of the quality process, if needed. The Validation Error Log will be available to DCSS at any time if needed to review open items.

6.2.2.4 CA SDU Performance Report (Quarterly)

The Quarterly Performance Report outlines performance requirements and results for the key service delivery processes comprising the CA SDU. There are several processes addressed in the report – Collections, Exceptions, Disbursements, Forms Processing and Electronic Help Desk

The Quarterly Performance Report evaluates each of these process areas along the following performance management dimensions:

1. **Performance Management Practices** – reviews the key performance management practices performed to assure satisfactory operational performance and service delivery results.
2. **Operational Volumetric** – includes volumetric that describe key service delivery processing volumes during the reporting period. Volumetric are generally described via histograms and may be decomposed in the relevant sub-categories. Volumetric tell us how much work is being performed, and what is driving the work.
3. **Performance Requirements and Results** - addresses performance relative to client service delivery performance requirements. Performance results are generally presented via time-series run charts designed to reveal trends or patterns that reflect the underlying capability of the processes involved.
4. **Performance Discussion** - identifies and evaluates relevant performance issues, improvement needs or opportunities, and reports any improvement actions initiated in response identified needs.

6.2.2.5 CA SDU Quality Assurance Report (Quarterly)

The CA SDU Quality Assurance Report addresses: 1) delivered quality performance, 2) service delivery process capability and 3) performance improvement. [SR 6.2.21-2]

Delivered quality performance relates to the products and/or services delivered to clients and customers and is generally evaluated relative to client or business requirements. Service Delivery Process capability relates to the underlying capability of the processes that produce and/or deliver products and services to clients. Process capability determines delivered quality. Performance improvement includes the analysis activities performed to identify improvement needs and/or opportunities, and the actions conducted to resolve improvement needs.

The CA SDU Quality Assurance Report is organized into two parts:

The first part evaluates quality performance from the client perspective – focusing on client reported quality issues and feedback. This perspective is generally referred to as the Voice of the Customer (VOC).

The second part evaluates quality from the service delivery perspective – focusing on measurements of product and service quality relative to performance requirements and the processes that produce and deliver them. Since products and services are produced by processes, this section is organized by Service Delivery Process, not organizational function.

The key process areas addressed in this part include: 1) Collections, 2) Exceptions, 3) Disbursements, 4) Customer Service and 5) Systems.

Within each process area, key performance indicators are defined and evaluated using the following categories:

1) Operational Definitions – defines the performance indicator and associated requirements

2) Delivered Quality Results – describes performance levels and trends relative to requirements. Results are generally presented via time-series run charts.

3) Process Capability Analysis – evaluates the underlying capability of processes to produce quality results that comply with requirements. This generally involves the use of Control Charts to evaluate the degree of statistical control exhibited by processes and Capability Diagrams to evaluate the statistical capability of processes. Process capability uses predictive indicators to proactively manage processes, instead of just waiting for service delivery non-conformities.

4) Improvement Analysis – evaluates delivered quality results and process capability analysis results to identify: 1) improvement needs and 2) improvement opportunities. Improvement actions dispatched to address needs and opportunities are described in this section

6.2.2.6 CA SDU Process Improvement Report (Monthly)

Process Improvement Report summarizes performance levels and improvement actions. Process Improvement projects are tracked by the Production Incident Resolution process and Continuous Improvement process using Problem and Change Process Inventory. The report will contain project information, problem description and solution status information on open and closed projects for the reporting period. [SR 6.2.21-1]

6.3 Associated SOWs

Table 6-2 - Associated SOWs

SOW#	CATEGORY	SUBCATEGORY	REQUIREMENT TEXT	SOURCE REFERENCE
6.2.21 1	RL - Reports and Logs	REP - Reports	The SP shall provide DCSS with the following quality assurance-related reports: 1) Process Improvement Report (Monthly) The contents of the reports listed above will be defined in the CA SDU Quality Assurance Plan (CDL OPS 007).	Project Charter, Goal Set 9
SR 6.2.21 2	RL - Reports and Logs	REP - Reports	The SP shall provide DCSS with the following quarterly quality assurance-related reports: 2) Quality Assurance Report The contents of the reports listed above will be defined in the CA SDU Quality Assurance Plan (CDL OPS 007).	Project Charter, Goal Set 9
SR 5.4.25	OP - Operations	CUS - Customer Service	The SP shall monitor both the Electronic Help Desk and State/LCSA Help Desk calls for quality service and provide results to DCSS upon request.	Project Charter, Goal Set 2
SR 7.1.1	SL - Service Level Standard	GEN – General	The SP shall transmit Image Cash Letter deposits to the CTS banks by 3:00 PM Pacific Time on the same day received at the CA SDU.	SAM 8023
SR 7.1.1 a	SL - Service Level Standard	GEN – General	If not a banking day or if the negotiable instrument is received after 1:00 PM Pacific Time, the deposit shall be made by 3:00 PM Pacific Time the next banking day.	SAM 8023
SR 7.1.2	SL - Service Level Standard	GEN – General	The SP shall process and transmit all data files to CSE according to the batch schedule.	Project Charter, Goal Set 1
SR 7.1.3	SL - Service Level Standard	GEN – General	The SP shall maintain their assigned daily average of suspended logical collections, in an amount less than or equal to $200,000.	DCSS Strategic Plan
SR 7.1.4	SL - Service Level Standard	GEN – General	The SP shall open a new Non IV-D case or update an existing Non IV-D case per DCSS defined business rules within 7 business days of receipt of the FL-191 and/or FL-195.	Project Charter, Goal Set 1
SR 7.1.5	SL - Service Level Standard	GEN – General	The SP shall mail paper disbursements the same day disbursement instructions become available for processing.	Project Charter, Goal Set 1
SR 7.1.6	SL - Service Level Standard	GEN – General	The SP shall transmit electronic disbursements the same day disbursement instructions become available for processing.	Project Charter, Goal Set 1
SR 7.1.7	SL - Service Level Standard	GEN – General	Within the agreed upon volumes, the SP's Electronic Help Desk shall close all Electronic Help Desk and State/LCSA Help Desk tickets by the end of the next business day from receipt of the initial call.	Project Charter, Goal Set 4

SOW#	CATEGORY	SUBCATEGORY	REQUIREMENT TEXT	SOURCE REFERENCE
SR 7.1.10	SL - Service Level Standard	GEN – General	The SP shall make corrections to deficiencies found through any audit in the agreed upon timeframe	Project Charter, Goal Set 4

7 OPERATIONAL EXCELLENCE ROADMAP

This section provides a more thorough view of the XEROX OMS and how the Operational Excellence Roadmap is used to deploy OMS to service delivery, support and management processes. OMS deployment is handled as a stage 2 initiative, led by the XEROX QA Manager and CA SDU management team.

7.1 OMS Overview

The XEROX OMS is the central and sustaining component of the XEROX Operational Excellence Framework. As mentioned in the introduction, the operational excellence framework leverages the Quality Trilogy established by Joseph Juran to describe the 3 core operational disciplines used to plan, manage and improve operational practices and results (see Figure 7-1).

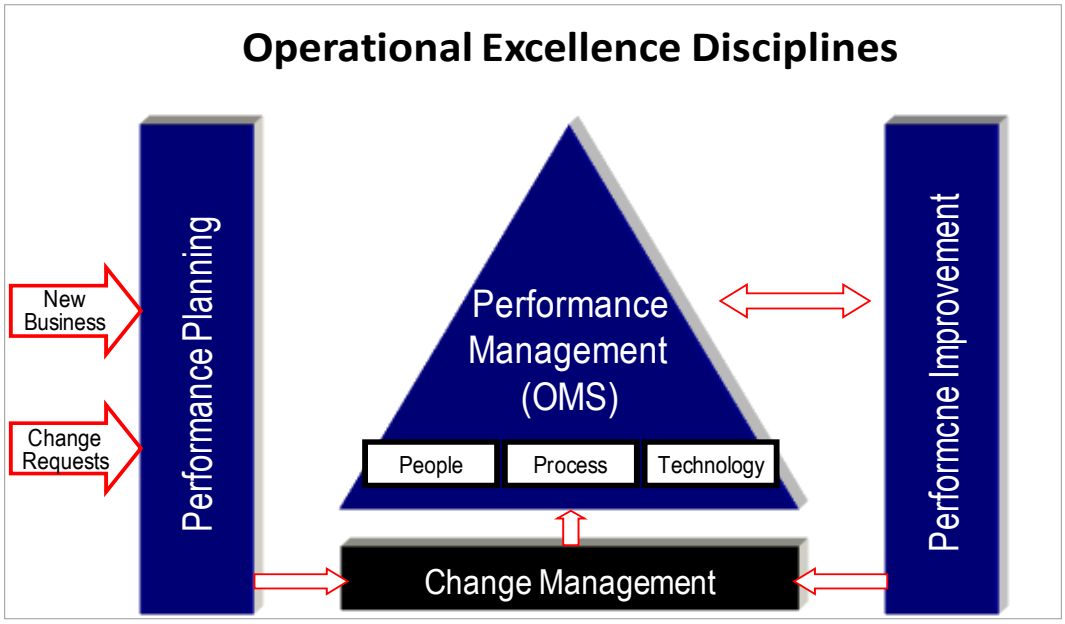

Figure 7-1 - Operational Excellence Disciplines

1) Discipline 1 – Performance Planning

Performance Planning builds performance capability and performance management into operational solutions. Performance Planning is performed initially as part of the new solution development process, and on a continuing basis as required to address changing solution requirements. Effective performance planning prevents problems when solutions are in steady state operations by assuring solutions are capable and effectively monitored and managed.

The Performance Planning discipline does not replace existing development and implementation methodologies. Instead, it supplements them with advanced quality planning tools – such as Quality Function Deployment (QFD) and Failure Mode Effects Analysis (FMEA). Operational Planning steps are performed in conjunction with the first three phases of the Operational Excellence Roadmap (described in Section 5.2)

2) Discipline 2 - Performance Management

Performance Management uses the OMS to manage the key operational assets (people, process and technology) that support execution of steady state client service delivery processes. The discipline

combines the quality and process management methods promoted by Lean Six Sigma with the performance management disciplines promoted by ISO 9001, Baldrige and the Balanced Scorecard to establish a fully integrated performance system.

The OMS is operationally defined via the OMS pyramid (see Figure 7-2). The pyramid is comprised of 5 levels, where each level addresses a specific dimension of performance management and builds on the capabilities established by lower levels.

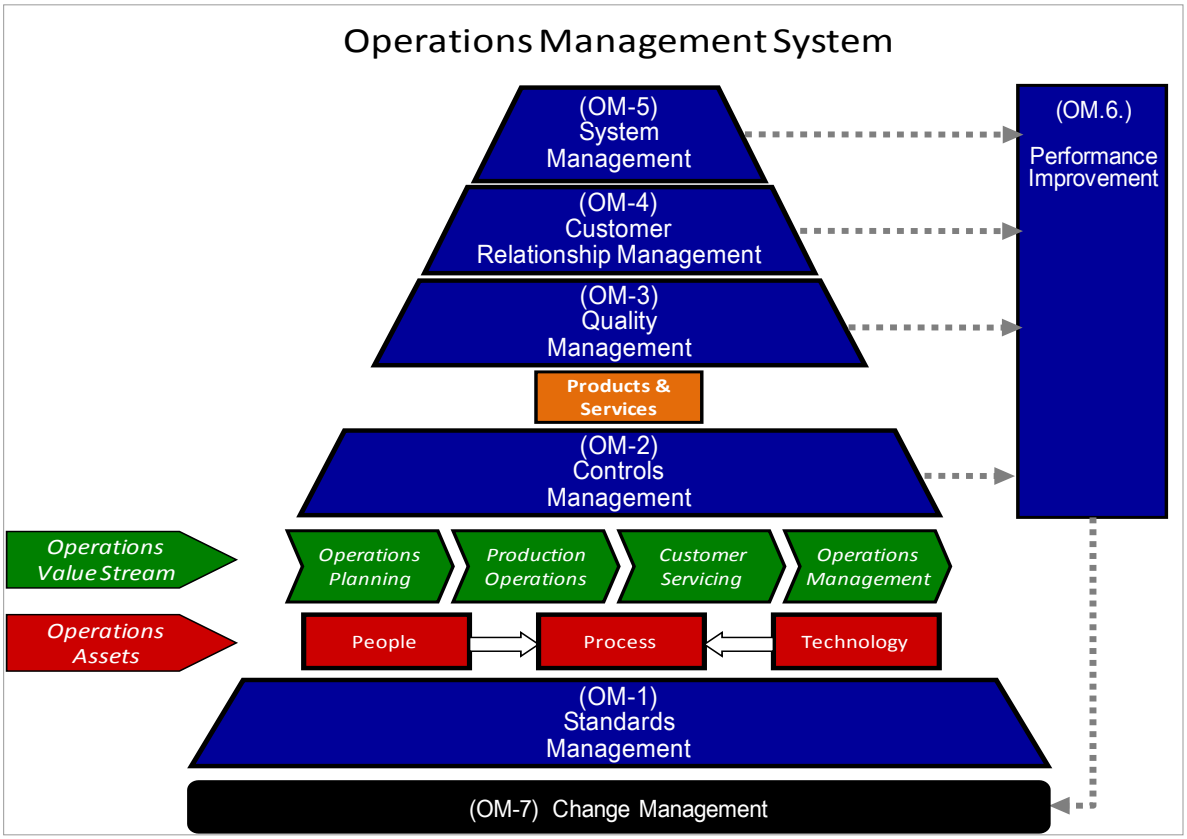

Figure 7-2 - Operations Management System Framework

The five OMS levels are:

- Level 1 - Standards Management – serves as the foundation for OMS by establishing standardized methods that guide all practices related to operational assets and value stream operations. The primary objective is to establish operational repeatability and accountability via standard practices.
- Level 2 - Controls Management – assures the processes defined in level 1 operate in accordance with designs and are capable. Level 2 manages the compliance, capability and results of internal processes to proactively manage operational performance and delivered quality results.
- Level 3 - Quality Management – assures client delivered products and services comply with established requirements. Level 3 leverages traditional quality control tools to track and evaluate product and service quality trends and drive corrective actions, when needed.
- Level 4 - Customer Relationship Management - maintains alignment with clients and customers regarding expectations and perceptions of results delivered. CRM processes address requirements management, listening and communications methods, client servicing and access, and calibration.

- Level 5 - System Management - sustains the effectiveness of the performance management system by confirming compliance, monitoring results and managing goals to drive improvement. System management activities are performed by senior managers to assure they are appropriately engaged and accountable.

3) Discipline 3 - Performance Improvement

The Performance Improvement discipline completes the management cycle by responding to improvement needs identified by the various OMS control processes and to performance goals established by organizational leadership.

The Performance Improvement Discipline is comprised of 3 key process areas – including: 1) Problem Resolution Management, 2) Continuous Improvement Management, and 3) Problem and Improvement Management. These process areas are described in detail in Section 4.3 of this plan.

All changes to OMS processes that are identified by Performance Improvement processes are handled via the Change Management process, which is positioned in figure 7-2 as the foundation discipline.

7.2 Operational Excellence Deployment Roadmap

The Operational Excellence (OE) Roadmap was introduced in Section 1.1.2 as the approach used to implement the full OMS framework as part deployment stage 2. The OE Roadmap is shown again in this section as Figure 7-3.

As mentioned previously, the reason for positioning stage 2 as the OMS buildout stage is that the quality and process engineering tools used in the early OE Roadmap phases are more effective when applied to existing operational processes. For example, the method for determining operational controls depends on effective operational risk identification and assessment, which in turn, depends on accurate process workflow maps and some measure of real operational history.

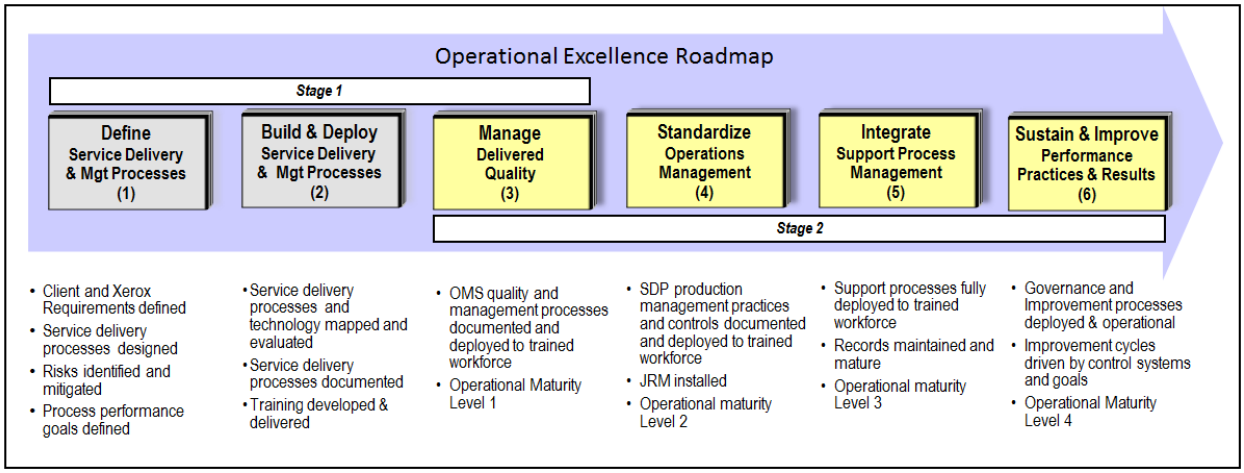

Figure 7-3 - Operational Excellence Roadmap

The following provides a high-level summary of the OE Roadmap phases included in deployment stage 2.

1) OE Roadmap Phase 3 – MANAGE Delivered Quality

The Manage phase addresses the operational processes that are considered "fundamental" to controlling delivered quality – that is, the quality management basics – such as requirements management, quality audit, problem management, reporting, etc.

It is important to note that OE roadmap phase 3 spans both deployment stage 1 and deployment stage 2. In practical terms, this means the OMS processes required to support go-live operations are addressed as part of deployment stage 1 (before go live) and then matured as required to enable certification as part of stage 2. Since certification audit requires evidence of compliance to standard practices and reviews of performance history to confirm result levels and patterns, processes must be allowed to mature before audits may be performed.

2) OE Roadmap Phase 4 - STANDARDIZE Operations Management

The Standardize phase focuses on assuring that Service Delivery Processes and associated control processes are effectively defined, documented and deployed.

The phase begins with a comprehensive criteria-based assessment of the artifacts required to support the in-scope SDPs to determine sufficiency, and then sets corrective actions as required to close identified gaps. SDP process control needs are evaluated using Failure Mode Effects Analysis techniques and translated to Process Control Plans (see section 3.1.3.1, Quality and Process Controls Foundations).

When Standardize is complete, the operational and control practices for all SDPs are fully deployed to trained workforce and ready of level 2 certification review.

3) OE Roadmap Step 5 – Integrate Support Processes

The Integrate phase addresses the supporting workforce and technology operational and control processes. The phase begins with a comprehensive criteria-based assessment of the processes and artifacts required to support the in-scope process areas to determine sufficiency, and then sets corrective actions as required to close identified gaps.

When Integrate is complete workforce and technology support processes are fully deployed to trained workforce and ready for level 3 certification review.

4) OE Roadmap Step 6 – Sustain & Improve Performance

The Sustain & Improve phase focuses on the process areas associated with sustaining OMS operational compliance and effectiveness, and driving continuous improvement. The phase installs and/or validates OMS governance, sets periodic performance goals to drive continuous improvement cycles, identifies and addresses calibration needs, and addresses business continuity needs.

When Sustain and Improve is complete, OMS is ready for level 4 certification review.

7.3 Linking OMS Process Areas to Deployment Phases

Figure 7-4 summarizes the process areas that comprise OMS and uses color codes to associate the process areas to the OE Roadmap phases outlined in the previous section. For example, the process areas highlighted in red are part of roadmap phase 3, and lead to level 1 certification.

Linking OMS Process Areas to Roadmap Phases

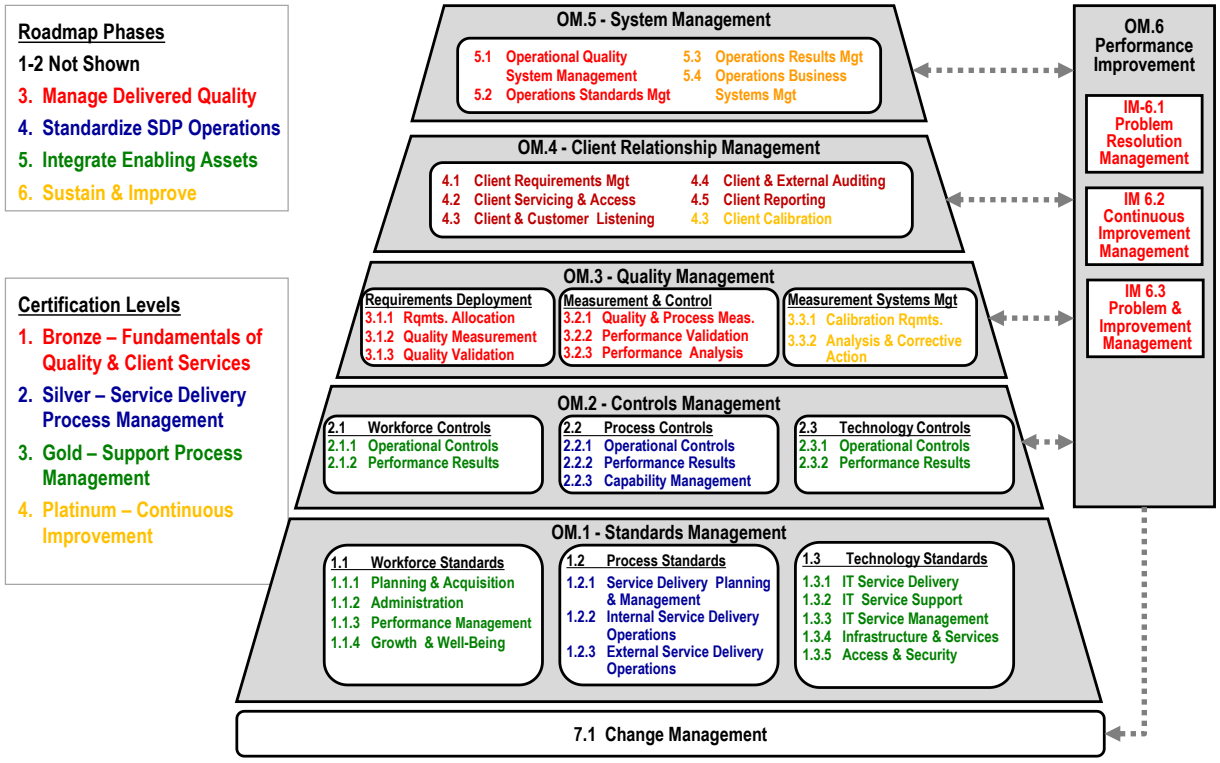

Figure 7-4 - Linking OMS Process Areas to OE Roadmap Stages

7.3.1 OE Roadmap Phase 3 Process Areas

Table 7-1 (immediately following) identifies all of the process areas that comprise roadmap phase 3 (including those not be included in figure 7-4 due to space limitations). All roadmap phase 3 process areas are addressed at the CA SDU level (i.e., each area is addressed one time at the CA SDU level) and must be satisfied before OMS Level 1 certification can be considered.

Table 7-1 - OE Roadmap Phase 3 OMS Process Areas

3.1.1 Quality Requirements Identification & Management
3.1.2 Quality Measurements Development
3.1.3 Quality Validation Development
3.2.1 Quality & Process Measurement Operations
3.2.2 Quality Validation Operations
3.2.3 Quality Performance Analysis
4.1.1 Client SLA Management
4.1.2 Non-Contractual Client Requirements
4.2.1 Client Servicing Access
4.2.2 Shared Information Management
4.2.3 Client Servicing Review
4.3.1 Client Improvement Suggestion Submission & Handling
4.3.2 Client Issues and Complaints Submission & Handling
4.3.4 Client Dispute Resolution

4.4.1 Client Auditing
4.4.2 External Auditing
4.4.1 Client Reporting Identification
4.4.2 Client Reporting Processes
5.1.1 Quality Management Policy Deployment
5.1.3 Quality Management Personnel Provisioning
5.2.1 Operating Standards Definition and Deployment
5.2.2 Operating Standards Access Management
5.2.3 Operating Standards Responsibility Matrix
5.2.4 Operating Standards Management Review
5.4.1 Business Continuity Management
6.1.1 Problem Capture & Prioritization
6.1.2 Problem Tracking, Management & Reporting
6.1.3 Corrective Action Planning & Management
6.1.4 Corrective Action Implementation & Control
6.3.1 Governance
6.3.2 Methodology
6.3.3 Facilitation Resource Provisioning
7.1.1 Change Request Receipt & Evaluation
7.1.2 Change Planning
7.1.3 Change Tracking, Management & Reporting
7.1.4 Change Implementation & Control

7.3.2 OE Roadmap Phase 4 Process Areas

Table 7-2 identifies the process areas that comprise roadmap phase 4. All phase 4 process areas are addressed at the Service Delivery Process level (i.e., each area is addressed one time per SDP) and must be satisfied before OMS Level 2 certification can be considered.

Table 7-2 - OE Roadmap Phase 4 OMS Process Areas

1.2.1 Service Delivery Planning & Management
1.2.2 Service Delivery Operations
1.2.3 External Service Delivery Management
2.2.1 Service Delivery Process Operations Controls
2.2.2 Service Delivery Process Results Management
2.2.3 Service Delivery Process Capability Management

7.3.3 OE Roadmap Phase 5 Process Areas

Table 7-3 identifies the process areas that comprise roadmap phase 5. All phase 5 process areas are addressed at the CA SDU level (i.e., each addressed once) and must be satisfied before OMS Level 3 certification can be considered.

Table 7-3 - OE Roadmap Phase 5 OMS Process Areas

1.1.1 Workforce Planning and Acquisition
1.1.2 Workforce Administration

1.1.3 Workforce Performance Management
1.1.4 Workforce Growth and Well-Being
1.3.1 Information Technology Service Delivery
1.3.2 Information Technology Process Management
1.3.3 Information Technology Support Services Management
1.3.4 Infrastructure, Equipment & Services
1.3.5 Physical Access & Data Security
2.1.1 Workforce Operational Controls
2.1.2 Workforce Results Management
2.3.1 Technology Operational Controls
2.3.2 Technology Results Management
4.3.3 Participant Issues & Complaints Submission & Handling

7.3.4 OE Roadmap Phase 6 Process Areas

Table 7-4 identifies the process areas that comprise roadmap phase 6. All phase process areas are addressed at the CA SDU level (i.e., each addressed once).

Table 7-4 - OE Roadmap Phase 6 OMS Process Areas

3.3.1 Internal Calibration Requirements Analysis
3.3.2 Internal Calibration Measurement, Analysis and Corrective Action
4.6.1 Client Calibration Needs Identification
4.6.2 Client Calibration Processes
5.1.2 Quality Manual
5.3.1 Operating Results Goals Definition & Deployment
5.3.2 Operating Results Review & Management
5.4.2 Succession Planning & Management
5.4.3 Enterprise Program Deployment and Operation
6.2.1 Improvement Needs Identification
6.2.2 Improvement Participation
6.2.3 Improvement Projects Selection & Planning
6.2.4 Improvement Projects Tracking & Management
6.2.5 Improvement Projects Completion

7.4 OMS Criteria & Evidence

OMS Criteria Types

OMS is a criteria based system that uses 3 types of criteria to determine the sufficiency process areas.

1) Approach Criteria

Approach criteria address approach design factors – including:

- is the approach able to fulfill the established purpose and associated performance requirements?
- does the approach set clear execution accountabilities and results expectations?
- does the approach assure internal integrity (i.e., identify and resolve issues)?
- is the approach repeatable and reproducible?

- is the approach aligned with other approaches and best practices?

An example of the Approach criteria used to evaluate the approach for Operating Standards Management Review (process area 5.2.4) includes:

5.2.4-a.1	Is there a documented approach for conducting systematic management reviews of all operational practices (whether defined or documented)?
5.2.4-a.2	Does the approach address all process areas designated as requiring management review in accordance with section 5.2.4. (Note - management review designations are included in Management and Learning Criteria for each process area, when present)?
5.2.4-a.3	Does the approach include provisions for confirming that processes designated for management review are periodically evaluated to confirm their continued effectiveness?
5.2.4-a.4	Does the approach include provisions for confirming that processes designated for management review are periodically evaluated to confirm compliance to established methods (either documented or defined)?
5.2.4-a.5	Does the approach describe review methods and schedules?
5.2.4-a.6	Does the approach include requirements for initiating corrective actions when non-compliances are detected?
5.2.4-a.7	Does the approach produce records of reviews performed, results obtained and corrective actions initiated, if any?

2) Deployment Criteria

Deployment criteria are used to confirm that approaches are well deployed – including:

- are required operational knowledge and skills systematically transferred and confirmed?
- are operational accountabilities systematically communicated and confirmed?
- is the approach deployed across relevant work units and personnel?
- is the approach followed consistently by all assigned personnel?

An example of the Deployment criteria used to evaluate deployment of the Operating Standards Management Review process area (process area 5.2.4) includes:

5.2.4-d.1	Are accountabilities for performing operating standards management reviews documented and maintained?
5.2.4-d.2	Have accountabilities for performing operating standards management reviews been communicated to assigned personnel?
5.2.4-d.3	Are operating standards management reviews conducted in accordance with established processes and schedules?
5.2.4-d.4	Are records maintained of operating standards management reviews performed, results obtained and corrective actions initiated, if any?

3) Management and Learning Criteria

Management and Learning criteria are designed to assure approach designs and deployment continue to meet performance expectations, and to drive improvement cycles – by asking:

- is approach effectiveness confirmed on a regular and systematic basis?
- is approach deployment confirmed on a regular and systematic basis?
- are corrective actions initiated when required to improve approach effectiveness or deployment?

- are performance expectations reviewed and adjusted periodically to drive improvement?

An example of the Management & Learning criteria used to evaluate management and learning for Operating Standards Management Review process area (process area 5.2.4) include:

5.2.4-m.1	Does management periodically review the approaches used for reviewing operating standards in accordance with Section 5.2.4 to assure continued effectiveness and initiate improvement actions when warranted?

OMS Evidence Types

All OMS criteria are evaluated using one of the three evidence types identified in figure 7-5, below:

		Criteria Type		
		Approach Criteria	**Deployment Criteria**	**Management & Learning Criteria**
Evidence Type	**Documented**	Approach verified via review of documented procedures, instructions, manuals or checklist that describe approach operation	Deployment verified via review of records, logs or work products that demonstrate utilization of approach by assigned personnel	Management and learning confirmed via review of review records and results, and corrective actions initiated (when appropriate)
	Verified	Approach verified via auditor review with assigned personnel	Deployment verified via auditor observation of assigned personnel or confirmation with work product recipients	Management and Learning confirmed via review of management review records and findings.
	Avadavat	Approach confirmed via written statement of compliance from management.	Deployment confirmed via written statement from management	Management and learning confirmed via written statement of compliance from management

Figure 7-5 – OMS Evidence Types by Criteria Categories

7.5 Implementation Planning & Management

Implementation Timeline

Before stage 2 can be initiated, all core OMS processes will be fully operational and yielding products and services that comply with client requirements. When these conditions are satisfied, the CA SDU will begin working through roadmap phases 3 to 6, with the completion of each phase marked by successful satisfaction of the certification criteria for that level.

It should be noted that the work effort associated with each remaining roadmap phases varies considerably - driven by such factors as the number of service delivery processes involved, the number of operating groups involved, and the maturity of existing methods and documentation. Based on these factors, it is not possible to provide a firm end-to-end timeline for completion. However, (and with the preceding caveat in place), the CA SDU has set the target dates included in table 7-6 (Tentative OE Roadmap Targets) for internal planning purposes.

Table 7-5 – Tentative OE Roadmap Targets

Roadmap Phase	OMS Phase	Target Date
3 - Manage	Certification level 1– Fundamentals of Quality and Client Services	07/31/13
4 – Standardize	Certification Level 2- Service Delivery Process Management	12/31/13

5 – Integrate	Certification Level 3 – Support Process Management	07/31/14
6 – Sustain & Improve	Certification Level 4 – Continuous Improvement	12/31/14

Implementation Process

The following outlines the high-level action strategy and steps used to address each roadmap phase:

1) Initial Planning
   a) Quality Manager identifies the artifacts required to support all in-scope process areas
   b) Quality Manager identifies 1 Process Owner and 2 Peer Reviewers for all artifacts
2) Process Artifact Preparation
   a) Process Owners conduct artifact self-assessments using OMS criteria
   b) Process Owners develop or adjust artifacts as required to satisfy criteria
   c) Peer Reviewers assess artifacts using OMS criteria – and advise owners of any deficiencies found
   d) Process Owners incorporate appropriate reviewer feedback and move artifacts to production library
3) Process Deployment Planning
   a) Process Owners identify: 1) deployment needs, 2) deployment approaches and 3) deployment maturity needs for completed artifacts
   b) Process Owners forward completed artifacts and deployment information to Quality Manager to signal readiness
   c) Quality Manager confirms and communicates readiness to Artifact Owners
   d) Process Owners deploy new or adjusted artifacts and set deployment verification schedules
   e) Process Owners verify deployment effectiveness - making adjustments as required
4) Certification Planning
   a) Quality Manager identifies and prepares the assessment team members who will support readiness review and certification audit processes.
   b) Quality Manager plans and conducts a readiness review with Process Owners using established Readiness Review Process
   c) When Readiness Review successful, Quality Manager and assessment team plans and conducts certification audit using Certification Process and Tools
   d) Quality Manager and assessment team prepare audit findings and conduct findings review with Process Owners. Follow-up audits area scheduled as required to close identified caps.
   e) Process Owners make adjustments to artifacts and practices and required to close identified gaps.
   f) Quality Manager and assessment team plans and conducts follow-up audits as required to close identified gaps.

Implementation Management & Reporting

The Quality Manager is responsible for leading OE Roadmap deployment – including setting priorities and target dates, determining resource assignments, tracking schedule and deliverable quality performance, and keeping relevant stakeholders informed regarding deployment status.

The Quality Manager will identify and prepare the resources required to support readiness assessments and certification audits.

The Quality Manager will include OMS deployment updates in the Quarterly Quality Report to keep DCSS appraised regarding deployment progress and results.

7.6 Associated SOWs

Table 7-6 - Associated SOWs

SOW#	CATEGORY	SUBCATEGORY	REQUIREMENT TEXT	SOURCE REFERENCE
None				

8 APPENDIX

8.1 Glossary of Terms

Table 8-1 - Glossary of Terms

Capability Chart	A Statistical Process Control tool used to determine the process capability of a process. Tells us if a process is "capable".
CCSAS	California Child Support Automation System
CIP	Continuous Improvement Process
Common Cause Variation	Common-cause variation can be viewed as the general background noise that occurs in any system. It is a natural byproduct of the process design and is normally distributed (i.e., it aligns with the normal curve). A determinate of process capability.
Continuous Improvement Process (CIP)	The process used to conduct process improvement work.
Control Chart	A Statistical Process Control tool used to track and evaluate process variation. Tells if a process is "in control".
Correction	Action to correct defective service delivery items (e.g., correct a transition processed in error, correct a report, etc.). Defective items may be detected internally (by inspection) or externally (by customers). Corrections do not address problem causation.
Corrective Action	Actions to prevent the reoccurrence of non-conformities or performance issues by identifying and eliminating root causes. Corrective Actions involve permanent changes to Service Delivery Processes (i.e., methods, technology or workforce) to address future performance. Corrective Actions are conducted via the Production Incident Resolution Process.
CSE	Child Support Enforcement (System)
CSOP	CCSAS Systems Operations Plan
CTQ	A product of service attribute that is considered "Critical to Quality". Translates (customer) quality requirements into measureable attributes for product and service delivery items.
DCSS	Department of Child Support Services
Defect	A non-conformity to an established standard - principally used to describe service delivery defects or software defects. A service delivery item that is delivered out of compliance is considered to be defective, while each non-conformity present in the service delivery item is considered a defect. Software defects describe identified non-conformities to specifications. Defects may or may not be viewed as problems.
Defective	A service delivery items that contains one or more defects.
Defect Opportunity	An opportunity to create a defect (an unsatisfied CTQ) in a service

	delivery item. There may be multiple "opportunities" to create a defect within a single service delivery item.
DMAIC	Define Measure Analyze Improve Control, the Six Sigma Problem Resolution approach.
DPMO	Defects Per Million Opportunities is a normalized quality yield metric that reflects the underlying quality in service delivery items (products and services). DPMO is widely used as an indicatory of process capability. Computed as the number of defects identified per million defect opportunities.
First Pass Yield (FPY)	A process health indicator that reflects the percentage of service delivery items making it through a process without intervention (i.e., correction or rework).
Improvement Action	Actions to prevent potential non-conformities or performance issues, or to improve operational performance levels by identifying and eliminating root causes or constraints. Improvement actions involve permanent changes to Service Delivery Processes (i.e., methods, technology and workforce) to address future performance. Improvement actions are conducted via the Continuous Improvement Process.
Incident	An event that occurs during the execution of an operational or technical process or system that has the potential to disrupt service delivery that requires investigation and possible corrective action. Incidents may or may not produce problems.
MSA	Measurement Systems Analysis is a statistical method for evaluating the reliability of measurement systems (based on ANOVA - Analysis of Variance methods)
MPT	Misapplied Payment Trapper
Non-Conformity	An instance of a failure to conform to an established standard.
OMS	XEROX Operations Management System
Operational Controls Validations (OCV)	Scheduled audit to confirm that operational controls are performed timely, correctly, and driving appropriate responses.
Pareto Chart	A charting technique that applies the Pareto Principle (80/20) rule to identify leverage areas for improvement actions. Commonly used identify what to fix and where to fix.
Preventive Action	Action to prevent potential non-conformity or performance issues by identifying and eliminating root causes. Preventive action mitigates risk.
Process Approach Review (PAR)	A scheduled audit to confirm that operational process designs continue to be capable.
Process Capability	A predictive statistic that describes the ability of a processes to meet performance requirements, normally expressed as a capability percentage.
Process Control Check (PCK)	An internal step-level product check that confirms conformance to internal requirements

Process Control Plan	Identifies the quality and process control checks that are performed inside Service Delivery Processes to detect product and process non-conformities and to initiate in-flight responses. Control definitions include: risk parameters, control objectives, control frequencies and methods, procedural references, control standards and response plans. Control standards describe the objective criteria used to evaluate control performance and response plans describe the actions to be performed if standards are not met
Process Deployment Review (PDR)	A scheduled audit to confirm that operational processes continue to be deployed effectively.
Production Incident Response Process (PIR)	The process used to receive and resolve production incidents (i.e., situations demonstrably impacting service delivery results or capability). .
Process Measurement Plan	Identifies the quality and process performance metrics used to confirm quality delivery and process performance meet established requirements for Service Delivery Processes.
Process Performance Measurement (PPM)	A business process level metric that tracks process performance relative to process goals (a leading indicator of process health)
Process Performance Validation Plan	Identifies the performance validations to be performed for each SDP. The Performance Validation Plan uniquely identifies each validation operation, operationally defines validation methods and scheduling, and establishes the response actions to be deployed when non-conformities are identified. When sampling is used, sampling levels and methods are defined in the validation plan.
Process Performance Validation (PPV)	Scheduled audit to confirm that QPM and PPM result levels and trends are favorable.
Process Review Plan	Identifies the reviews to be performed for each SDP to assure the continued effectiveness of process designs and deployment – includes Process Approach Reviews, Process Deployment Reviews and Process Results Reviews.
Process Results Review (PRR)	A scheduled audit to confirm that operational processes continue to operate effectively and efficiently.
Product Quality Check (QCK)	An internal quality check that confirms conformance to quality requirements (usually linked to a QPM, which may be linked to an SLA)
PRT	Problem Resolution Team
QMS	Quality Management System
Quality Performance Measurement (QPM)	A final product or service metric that reflects delivered quality (may be linked to an SLA, and may be control via a Product Control Check)
RCA	Root cause analysis
Risks	Relate to things that may occur to cause incidents or defects.
RMP	CCSAS Release Management Plan

Run Chart	A time-series variable data plot used to reveal trends and/or patterns in performance results.
SDP	Service Delivery Process
CA SDU	State Disbursement Unit
Service Delivery Process	A business process that produces and delivers value adding products and services to customers. Service Delivery Processes (SDPs) comprise full end-to-end value streams that always begin and end with the customer. SDPs include: the 1) processing Methods, 2) that are performed by Workforce and 3) enabled by Technology to produce and deliver products and services.
SOP	Standard Operating Procedures
SOW/SR Validations (SRV)	Scheduled audit to confirm to compliance to practice and results related SRs
Special-Cause Variation	Variation that is not a normal part of a system (i.e., not common cause). Driven by external or intermittent causes that destabilize the process and make it unpredictable (i.e., it no longer aligns with the normal curve). Signals a process change.
SR Validation (SRV)	Scheduled audit to confirm that SOW requirements are fulfilled – focusing on practices compliance and results attainment requirements.
Statistical Process Control (SPC)	A statistical method used to proactively manage process performance by tracking and evaluating process variation. Determines the presence of special cause variation. Processes without special cause variation are said to be “in control”. .
Vendor Performance Measurement (VPM)	A performance metric that tracks vendor performance to expectations
Vendor Control Check (VQC)	A product quality control check used to confirm vendor supplied products or services are compliant with requirements
Workaround	Temporary actions to enable the continuation of service delivery operations when there are significant risks of future non-conformities or service loss. Examples of workarounds might include adding temporary resources to increase capability, implementing alternative methods that bypass problem processes, or adding additional checks and controls designed to detect risks. In all cases, workarounds are temporary measures that are not managed by the Change Management Process. Workarounds do not address problem causation.

8.2 SDP Measurement Plan

Client Name	DCSS	Service Delivery Process Measurement Plan					Document ID	QM-3.1.2.2		
Bus Group	CASDU						Completed By	O. Isayeva		
Operating Group	Collections						Completed Date	01/26/12		

Metric Description				Operational Definition			Measurement Operation				
ID	Type	Metric Name	Client SR / Owner	Metric Definition	Data Elements	Data Source	Freq	Capture Method / Recording Method	SOP	Data Location	Reporting Cycle
Note - All Measurement Operations are governed by OM-3.1.2.1-SOP											
Mail Processing											
DB-M02.1	QPM	Paper Disbursement Timeliness %	SR 7.1.5 / Ops Mgr	% of paper disbursements mailed on the same day disbursements became available for processing	# of paper disbursements mailed by EOD on the day disb became available for processing / Total # of processed paper disbursements available for processing	Manual check / KidStar	Daily 100%	Operator manually retrieves values / Manual entry	OM - 2.1.1	OMD 1 - Collections; CO-M01	Q
DB-M02.2	PPM	Check Pickup Timeliness Variance	NA / Ops Mgr	Variance between actual courier pickup and targeted courier pickup clock time (expressed as minutes)	Courier pickup clock time / Courier pickup target clock time	Manual check (Courier Pickup Log) / Standard value 4:30 PM PST	Daily 100%	Operator manually updates Daily Courier Log / Manual entry	OM - 2.1.1		
Work Process											
Work Process											

Measurement Types		
QPM	Qualify Performance Measurement	Product or service metric that reflects delivered quality
PPM	Process Performance Measurement	SDP or sub-process level metric that tracks performance relative to process goals derived from process purpose (leading indicator of process health)
VPM	Vendor Performance Measurement	Tracks vendor performance to expectations

Figure 8-1 - SDP Measurement Plan Template

ITEM	DEFINITION
Control ID	A unique control ID (e.g., DB-C02)
Control Type	Identifies if control is a PCK, QCK or VCK
Metric Name	A short descriptive metric name
Client SR	If the metric is linked to a client requirement, identifies the requirement
Metric Owner	Identifies the operational owner of the medic
Metric Definition	An operational defection of the metric.
Data Elements	Identifies the data elements that comprise the metric.
Data Sources	Identifies the data sources for each data element.
Measurement Frequency	Identifies the measurement frequency and sample rate, if applicable.
Capture Method	Describes how the measurements are captured (e.g., manually, system supplied, etc.)
Capture SOP	If applicable, identifies the SOP associated with data capture.
Recording Method	Describes how the measurement data will be recorded.
Recording SOP	If applicable, identifies the SOP associated with data recording.
Data Location	Identifies where the data will be stored.
Reporting Cycle	If applicable, identifies the reporting cycle.

Table 8-2 - SDP Measurement Plan Data Dictionary

8.3 SDP Control Plan

Client Name	DCSS	Service Delivery Process Control Plan						Document ID	QM-3.1.2.3
Bus Group	CASDU							Completed By	J.Doe
Operating Group	Collections							Completed Date	mm/dd/yy

Control		Risk Parameter Controlled	Control Objective & Approach	Control Operation					
ID	Type			Owner	Freq	Method	SOP	Control Standard	Response Plan
Work Process									
DB-C01	PCK	Check Stock Inventory	Assure sufficiency of print stock inventory - by comparing on hand balance by re-order point	Ben	W	Manual check	OM - 2.1.1	Minimum OHB = 200,000	Initiate inventory order
DB-C02	PCK	Checks Processing Throughput Rate	Confirm sufficiency of processing throughput rates by checking actual versus target rate every hour	Ben	Hourly	Manual check	OM 2.1.3	Calculated target processing rate - based on volume and window. Time window = 4 pm - Check Printing Start Time	Escalate to Operations Manager
Work Process									
Work Process									
Work Process									

Control Types		
PCK	Process Control Check	Internal process check to detect occurrence of internal failure modes - drives interventions during production cycle - before delivery
QCK	Product Quality Check	Internal product quality check to detect internal quality isses - drives interventions during" production cycle - before delivery
VCK	Vendor Control Check	Internal vendor check to confirm vendor compliance to standards - drives interventions during production cycle - before delivery

Figure 8-2 - SDP Control Plan Template

ITEM	DEFINITION
Control ID	A unique control ID (e.g., DB-C02)
Control Type	Identifies if the control is a PCK, QCK or VCK (defined in plan and in section 3.1.3)
Risk Parameter Controlled	Identifies the risk parameter controlled
Control Objective & Approach	Summarizes the purpose (objective) and approach for controlling the risk parameter
Control Owner	Identifies the operational owner of the control
Control Frequency	Identifies control schedule
Control Method	Describes the method used to perform the control (e.g., manual check, automated check)
Control SOP	Identifies the operational documentation that guides control operation
Control Standard	Defines the performance standard used to determine if control result is satisfactory, or if response is required.
Response Plan	Defines the actions to be taken if control result does not comply with standard.

Table 8-3 - SDP Control Plan Data Dictionary

8.4 SDP Validation Plan

Client Name	DCSS	Service Delivery Process Performance Validation Plan			Document ID	QM-3.1.2.3
Bus Group	CASDU				Completed By	O. Isayeva
Operating Group	Collections				Completed Date	02/08/12

Validation Identification				Validation Operation		
ID	Type	Validation Items	Reference *(Control or SR)*	Freq or Sample	Method & Procedures	Performance Standard
Paper Disbursements						
CO-V01	OCV	Check Stock Inventory	DB-C01	BW	1. Confirm Inventory Log updated in accordance with Control Plan 2. Confirm orders placed appropriately 3. Confirm actual balance = inventory balance	Defined in Control Plan
CO-V02	OCV	Checks Processing Throughput Rate	DB-C02	R1W	1. Confirm throughput rate calculated and posted 2. Confirm hourly checks made 3. Confirm escalations when needed	Defined in Control Plan
CO-V07	SRV	Paper Disbursement Timeliness	SR7.1.5	M	1. Confirm the MC Log current & complete 2. Confirm OMD data balances to MC Log 3. Confirm compliance to SR If not - confirm CA initiated. If not, initiate CA	The SP shall mail paper disbursements the same day disbursement instructions become available for processing.

Validation Types		
OCV	Operational Controls Validations	Periodic check to validate that operational controls are performend correctly and timely, using valid control data, and resulting in proper decisions
QRV	Quality Requirements Validations	Periodic checks to validate that Quality Requirements are fulfilled - focusing on practices compliance and results attainment
SRV	SR Validations	Periodic checks to validate that SOW Requirements are fullfilled - focusing on practices compliance and results attainment

Figure 8-3 - SDP Performance Validation Plan Template

ITEM	DEFINITION
Validation ID	A unique validation ID (e.g., DB-V01)
Validation Type	Identifies type of validation involved – i.e., PVC, OCV, SRV (defined in plan and in section 3.1.4)
Validation Items	Identifies the items that will be validated
Reference	Identifies references when appropriate (PPM or PQM ID for PPV validations, Control ID for OCV validations and SR for SRV validations)
Frequency &/or Sample	Identifies validation schedule and sampling methods, if warranted.
Method and Procedures	Describes the operational steps to performing the validation. Does not reference SOP as instructions are in plan.
Performance Standard	Defines the performance standard used to determine if validation result is satisfactory, or if response is required.

Table 8-4 - SDP Performance Validation Plan Data Dictionary

8.5 SDP Process Review Plan

Client Name	DCSS	**Service Delivery Process**	Document ID	QM-3.1.2.3
Bus Group	CASDU	**Process Review Plan**	Completed By	O. Isayeva
Operating Group	Collections		Completed Date	02/08/12

ID	Work Process		Review Schedule												Notes
		Review Type	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
CO-PR1	EFT File	Approach													
		Deployment													
		Results													
CO-PR1	EFT File	Approach													
		Deployment													
		Results													
CO-PR1	EFT File	Approach													
		Deployment													
		Results													
CO-PR1	EFT File	Approach													
		Deployment													
		Results													
CO-PR1	EFT File	Approach													
		Deployment													
		Results													

Process Review Types.

PRA	Process Review - Approach	Periodic review to confirm continued effectiveness on process Approach (i.e., design)
PRD	Process Review - Deployment	Periodic review to confirm continued effectiveness of approach Deployment
PRR	Process Review - Results	Periodic reivew to confirm standard processes are producing expected results

Figure 8-4 - SDP Process Review Plan Template

ITEM	DEFINITION
Review Item ID	Unique ID for each review item
Work Process	Identifies the work process being reviewed
Review Type	Identifies the type of review (Approach, Deployment or Results)
Review Schedule	Identifies when reviews are scheduled
Notes	Open notes

Table 8-5 - SDP Process Review Plan Data Dictionary

8.6 Production Incident Resolution Tracking Record

a) PIR Record Part 1

Production Incident Resolution Tracking Record

Xerox Incident #		**Tracking Rev No**	1
Incident Name		**Tracking Rev Date**	mm/dd/yy

2. INCIDENT IDENTIFICATION & RECEIPT					
Incident Owner *(the person owning resolution of the incident)*			**Contact Info**		
Incident Recipient *(the Xerox employee receiving the incident report)*			**Contact Info**		
Incident Reporter *(the person observed and reported the incident)*			**Date & Time Identified**		
Incident Definition *(describe the things gone wrong and their effects on service delivery)*					
Incident Impact Duration *(if appropriate, define when incident began and ended)*	**Start Date & Time**		**End Date & Time**		

3. INCIDENT REPORTING					
Req'd	**Checklist Item**	**Initiated By**	**Date& Time Initiated**	**Incident #**	**Prioritization**
☒	SDU Incident Initiated (RTC)				**Severity Code**
	SDU Internal Email Notification Sent				
☐	DCSS Incident Initiated				**Response Level**
	DCSS Email Notification Sent				

TRACKING INFORMATION

⇨ *Tracking information is used to: 1) plan and track execution of resolution process steps and 2) to manage delegated step level accountabilities, when appropriate. Step Owner and Exit Requirements are only used with needed to manage delegated steps. Checked boxes indicate required steps.*

Req'd	Step	Planned Completion	Actual Completion	Step Owner	Step Exit Requirements
☒	**4.1 Assessment Resourcing**				
☒	**4.2 Impact Measurement**				
☒	**5 Short-Term Actions**				
☒	**6.1 Root Cause Analysis**			Incident Owner	
☒	**6.2 Solution Identification**				
☒	**MR-1 Management Review**				
☒	**7.1 Change Initiation**				
☒	**7.2 Control Solutions**				
☒	**8. Incident Closeout**				
☒	**MR-2 Management Review**			Incident Owner	

4.1 ASSESSMENT RESOURCES *(what resources are needed to assess incident?)*

Resource Requirements *1) Identify resources required to support assessment and incident resolution work* *2) Check Approver box if resource must support root cause and solution findings*	**Name or Position**	**Organization**	**Approver**
			☐
			☐
			☐

Req'd	**Support Resource Requests** *(identify the resource requests initiated to secure external support resources)*	**Request #**	**Date & Time Submitted**	**Date & Time Responded**	**Result**
☐					

b) PIR Record Part 2

Production Incident Resolution Tracking Record

Xerox Incident #		**Tracking Rev No**	1
Incident Name		**Tracking Rev Date**	mm/dd/yy

4.2 INCIDENT IMPACT MEASUREMENT (*what is impacted and how much?)*	
Service Delivery Impact *(identify the products and/or services affected)*	[Clarify how service was degraded or impacted – identify the products affected or services impacted]
Problem Processes & Systems *(identify the service delivery work processes or technical systems involved)*	[Clarify the service delivery "work" processes and/or technical systems involved in affecting service delivery]
Problem Baseline *(if possible, quantify problem to size problem confirm resolution)*	[the baseline is a quantitative expression of the initial problem state to enable problem sizing to justify resolution and to confirm resolution when solutions applied]
Improvement Objectives *(how will success be determined?)*	[the objective describes the desired result (using same measures used to define the baseline) to enable confirmation of successful resolution].

5. INCIDENT TRIAGE (*what short term actions are required?)*	
Correction Needs *(do any product or service items require immediate correction –and if so, which ones)*	
Workaround Needs *(is a workaround required to continue operations before a final solution can be implemented?)*	

6.1 ROOT CAUSE ANALYSIS (*what is causing the presenting problem?)*		
Information Needs *(what information is needed to perform root cause analysis?)*		
Failure Mode *(what went wrong to produce the presenting problem?)*	[describe specifically **what** went wrong to produce the problem – see SOP for failure mode categories]	
Root Cause *(what caused the failure mode – and how do you know?)*	[describe **why** it went wrong - see SOP for list of possible root causes]	
Root Cause Analysis Review *(check box at right if Approvers designed in Section 4.1have participated in and/or approved problem analysis findings?)*		☐

6.2 SOLUTION IDENTIFICATION (how will the presenting problem be resolved?		
Solution Summary *(what must be changed to eliminate root causes?)*		
Solution Validation *(if warranted, describe how selected solution was validated to assure it will resolve presenting problem)*		
Solution Identification Review *(check box at right if Approvers designed in Section 4.1 have participated in and/or approved solution findings?)*		☐

7.1 SOLUTION DEVELOPMENT & DEPLOYMENT				
Change Request	**Number**		**Change Owner Name**	
	Date Initiated		**Date Completed**	

7.2 SOLUTION CONTROL	
Solution Control Plan *(if warranted, describe what controls will be used to assure the solution operates effective after deployment)*	

8. INCIDENT REVIEW & CLOSEOUT				
Solution Result *(describe results of solution deployment - in terms of problem baseline and objectives)*				
Req'd	**Closeout Checklist**	**Performed By**	**Date& Time Performed**	**Notes**
☐	SDU Incident Closed (RTC)			
☐	DCSS Closeout Performed			

Figure 8-5 – Production Incident Resolution Tracking Record

8.7 Continuous Improvement Project Tracking Record

a) CIP Record Part 1

Continuous Improvement Process Record

Project No	ACS-CCR-2012-###	**Tracking Rev No**	1
Project Name	[short description of project]	**Tracking Rev Date**	Mm/dd/yyyy

1.1 REQUEST IDENTIFICATION			
Project Owner		**Contact Info**	
Requestor Name		**Contact Info**	
Approver Name		**Contact Info**	
Description *(high level description of problem or opportunity)*			

1.2 RESOURCE PLAN				
Resource Requirements *1) Identify resources required to support assessment and improvement resolution work* *2) Check Approver box if resource must support problem analysis and solution findings*	**Name**	**Role**	**Organization**	**Approver**
				☐
				☐
				☐

TRACKING INFORMATION

Req'd	Step	Planned Completion	Step Owner	Actual Completion	Deliverables or Exit Requirements
	2 & 3 Define & Measure				
☒	MR-1 Management Review				
	4. Root Cause Analysis				
	5. Solution Identification				
☐	MR-2 Management Review				
	6. Change Initiation				
	7. Control Solutions				
	8. Solution Closeout				
☐	MR-3 Management Review				

2. PROBLEM DEFINITION	
Problem Statement *(defining the presenting problem, i.e., symptoms)*	[describe the problem by describing the things gone wrong and their effects – e.g., Too many errors resulting from use of mass data templates – requiring additional resources to check for errors and to implement corrections for undetected errors]
Problem Processes & Systems *(identify the service delivery work processes or technical systems involved)*	[Clarify the service delivery "work" processes and/or technical systems involved in affecting service delivery]

3. PROBLEM MEASUREMENT	
Problem Baseline *(if possible, quantify problem to size problem confirm resolution)*	[the baseline describes the initial problem condition in order to enable problem sizing and to confirm resolution when solutions applied]
Improvement Objectives *(how will success be determined?)*	[the objective describes the desired result (using same measures used to define the baseline) to enable confirmation of successful resolution].

b) CIP Record Part 2

Continuous Improvement Process Record

Project No	ACS-CCR-2012-###	**Tracking Rev No**	1
Project Name	[short description of project]	**Tracking Rev Date**	Mm/dd/yyyy

4. PROBLEM ANALYSIS		
Problem Failure Mode *(what went wrong to produce presenting problem?)*	[describe specifically **what** went wrong to produce the problem – see SOP for failure mode categories]	
Problem Root Cause *(what caused the failure mode – and how do you know?)*	[describe **why** it went wrong - see SOP for list of possible root causes]	
Problem Analysis Review *(check box at right if Approvers designed in Section 1.2 have participated in and/or approved problem analysis findings?)*		☐

5 SOLUTION IDENTIFICATION		
Solution Summary *(what must be changed to eliminate root causes?))*		
Solution Validation *(if warranted, describe how selected solution was validated to assure it will resolve presenting problem)*		
Solution Identification Review *(check box at right if Approvers designed in Section 1.2 have participated in and/or approved solution findings?)*		☐

6. SOLUTION DEVELOPMENT & DEPLOYMENT				
Change Request	**Number**		**Owner Name**	
	Date Initiated		**Date Completed**	

7. SOLUTION CONTROL	
Solution Control Plan *(if warranted, describe what controls will be used to assure the solution operates effective after deployment)*	

8. SOLUTION REVIEW & CLOSEOUT	
Solution Result *(describe results of solution deployment - in terms of problem baseline and objectives)*	

Figure 8-6 – Continuous Improvement Project Tracking Record

8.8 Change Request & Tracking Record

a) CR Record Part 1

Figure 8-7 – Change Request & Tracking Record

Change Request & Tracking Record

Change Request No	CCR-2012-[XXX]	**Revision No**	[1]
Change Coordinator	[Person responsible for coordinating change request]	**Revision Date**	[mm/dd/yy]

1.1 CHANGE REQUEST IDENTIFICATION				
Requestor Name	[Requestor name goes here]		**Request Date**	[mm/dd/yy]
Requestor Email	[Requestor email address]		**Requestor Phone**	[###.###.####]
Source Request Type & Date Requirements	☐	**Production Incident**	**Source Request #**	
	☐	**Process Improvement**	**Source Request Owner**	
	☐	**Change Order**	**Date Change Needed**	
	☐	**Other**	**Date Workaround Required By**	

1.2 CHANGE DESCRIPTION *(What is needed and why ?)*	
Change Description	• [provide a high level description of the proposed change]
Business Case	• [identify the expected benefits associated with the proposed change – in terms of services delivered, service delivery effectiveness or efficiency. translate benefits to a quantified economic value - in terms of business value or operational efficiency] [when warranted – provide cost / benefit analysis to support proposed change]
Impacted Stakeholders	• [identify the stakeholders and/or constituencies who will be impacted by proposed change]
Dependencies	• [identify any other changes dependent on the changes requested]

TAILORING & TRACKING INFORMATION

⇨ *Tailoring & Tracking information is used to: 1) tailor, plan and track execution of change process steps and 2) to manage delegated step level accountabilities, when appropriate. Tailoring is determined when performing the steps following this section. Checked boxes (below) indicate steps that are tailored in as required. Delegated steps use Step Owner and Exit Requirements columns to manage accountabilities.*

Req'd	Step		Planned Completion	Actual Completion	Step Owner	Exit Requirements
☒	2	**Impact & Requirements Analysis**				
☐	3.2	**Development Requirements**				
☐	MR-1	**Requirements Review** *(not used for PIR/CIP)*				
☐	3.3	**Change Review & Approval**				
☐	4.1	**Development Planning**				
☒		**Change Development**				
☐	4.2	**Development Exit Requirements**				
☒	MR-2	**Change OAT Readiness**				
☐	5.2	**Operations Acceptance Testing**				
☐	5.3	**Customer Acceptance Testing**				
☐	6.1	**SDU Systems Release Management**				
☐	7.1	**SDU Deployment Planning**				
☐	7.2	**SDU Deployment Completion Checklist**				
☒	MR-3	**Change Completion** *(not used for PIR/CIP)*				

b) CR Record Part 2

Change Request & Tracking Record

Change Request No	CCR-2012-[XXX]	**Revision No**	[1]
Change Coordinator	[Person responsible for coordinating change request]	**Revision Date**	[mm/dd/yy]

2. CHANGE IMPACT & REQUIREMENTS ANALYSIS *(What must be changed to accomplish purpose?)*

Identify the things that must be changed to support Change Request – consider:	**Configuration Items (CI)** (Identify all Configuration Items)	**Requirements Specifications**		**Requirements Specifications Review**		
		Req'd	**Development Owner**	**Req'd**	**Reviewer Name**	**Review Date**
1. **Business Plans & Processes** – e.g., contract deliverables, business process documents 2. **Management & Support Processes** – reporting, controls, etc. 3. **Software** – application and operating system software 4. **Technical Infrastructure** – hardware, communications 5. **Operational Documentation** - SOPs, WPIs Aids, Records and Logs 6. **Workforce Development** – capability, capacity		☐		☐		99/99/99
		☐		☐		
		☐		☐		
		☐		☐		
		☐		☐		
		☐		☐		

3.1 CHANGE DEVELOPMENT REQUIREMENTS

⇨If development requirement estimates are required before the Change Request can be approved for development, check the box below

Req'd		
☐	**Resource Requirements**	[xxxx]
	Timing Requirements	
	Costs Requirements	

3.2 CHANGE REVIEW & APPROVAL

⇨ If the Change Request requires business or technical reviews before development planning can begin, check the appropriate boxes below

Req'd	**Review Type**	**Reviewer Names**	**Review Status**	**Status Date**
☒	**Xerox Business Review**			
☐	**Client Business Review**			
☐	**Xerox CCB Review**			
☐	**Client CCB Review**			

4.1 CHANGE DEVELOPMENT PLANNING *(What work products are required to before Development may start?)*

⇨ If any of the following planning work products are required before change development may begin, check the appropriate boxes below

Req'd	**Component**	**Owner**	**Create Date**	**Approved By**	**Date Approved**
	Note – Specifications requirements and approvals, if any, are identified in Section 2				
☐	Business Documents Change Plan				
☐	Process Change Plan				
☐	Process Change Test Plan				
☐	Technology Change Plan				
☐	Technology Test Inventory				
☐	Technology Release Calendar				
☐	Workforce Development Plan				

c) CR Record Part 3

Change Request & Tracking Record

Change Request No	CCR-2012-[XXX]	**Revision No**	[1]
Change Coordinator	[Person responsible for coordinating change request]	**Revision Date**	[mm/dd/yy]

4.2 CHANGE DEVELOPMENT EXIT REQUIREMENTS *(Are change products ready for Acceptance Testing?)*

⇨ If any of the following development work products are required before Acceptance Testing may begin, check the appropriate boxes below

Req'd	Type	Description	Version	Approved By	Date Approved
☐	Business Documents				
☐	Process Documentation				
☐	Software Test Reports				
☐	Software Release Notes				
☐	Operational Documentation				

5.2 OPERATIONS ACCEPTANCE TESTING (OAT)

⇨ If the change involves technical systems changes that warrant Operations Acceptance Testing, check the appropriate boxes below

☐ **⇦ Operations Acceptance Testing Required** — **OAT Owner ⇨**

5.1 OAT PLANNING REQUIREMENTS *(What is required before Acceptance Testing can begin?)*

Planning Work Products Required		Owner	Create Date	Approved By	Date Approved
☐	Acceptance Test Inventory				
☐	Acceptance Test Plan				

5.2 OAT EXIT REQUIREMENTS *(Are changes validated and ready for Release / Deployment?)*

Components Required		Description (List all OAT Artifacts Required)	Approved By	Date Approved
☐	Acceptance Test Reports			

5.3 CUSTOMER ACCEPTANCE TESTING PLANNING REQUIREMENTS *(What is required before Customer Acceptance Testing can begin?)*

⇨ If the change warrants Customer Acceptance Testing, check the appropriate boxes below

☐ **⇦ Customer Acceptance Testing Required** — **CAT Owner ⇨**

Planning Work Products Required		Owner	Create Date	Approved By	Date Approved
☐	Acceptance Test Inventory				
☐	Acceptance Test Plan				

6.1 SDU RELEASE MANAGEMENT *(What is required before Release Management can begin?)*

⇨ If the change involves technical systems changes that require Release Management, check the appropriate boxes below

☐ **⇦ Release Management Required** — **Release Management Owner ⇨**

Work Products Required		Owner	Create Date	Approved By	Date Approved
☐	Change Release Notes				
☐	Change Release Schedule				
ACS CCB Approval					
Client CCB Approval					

8.9 Improvement Methodology

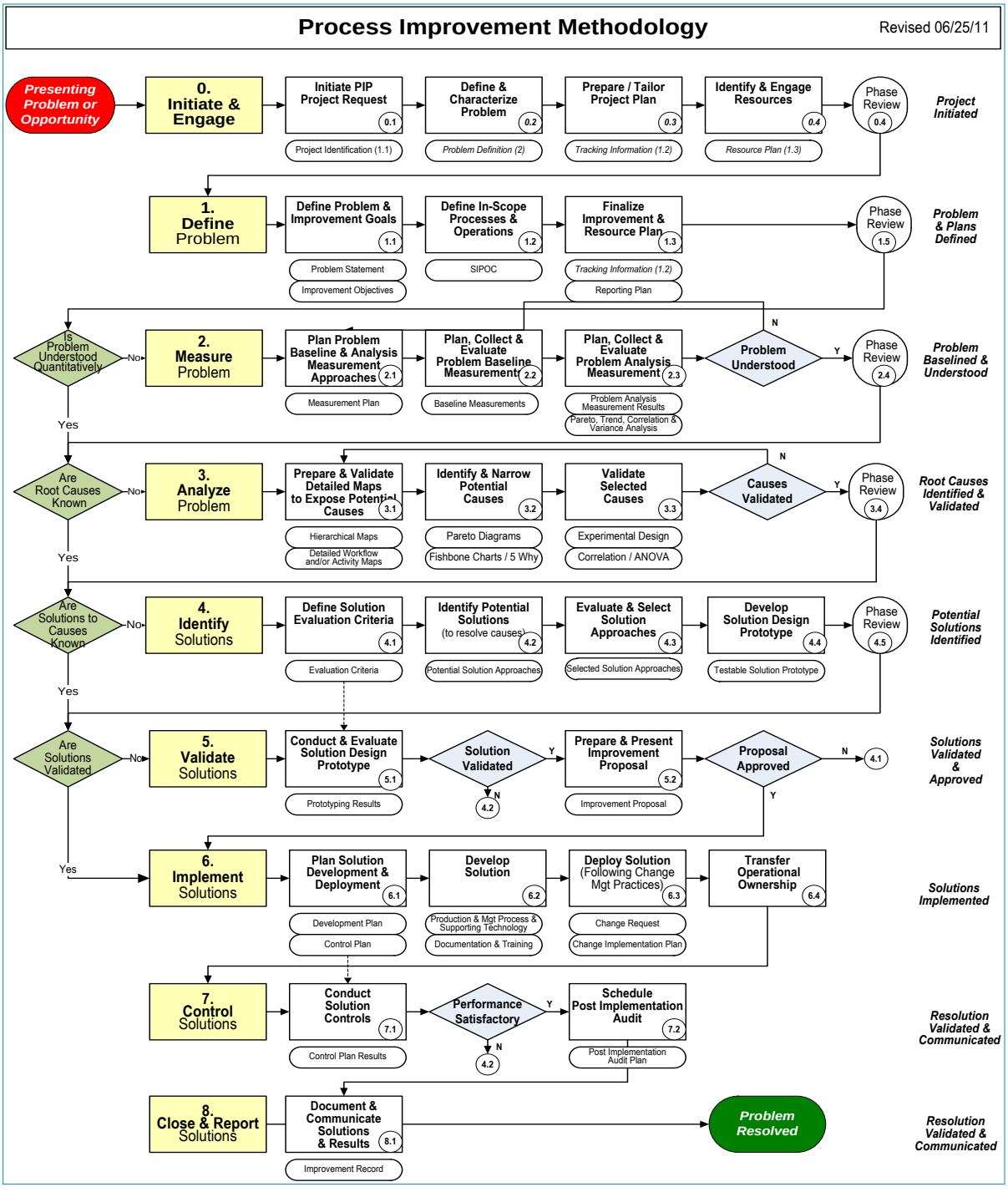

Figure 8-8 – Improvement Methodology